DOCUMENT RESUME

ED 221 222 IR 050 000

AUTHOR Sager, Donald J.
TITLE The American Public Library. Research Report.
INSTITUTION OCLC Online Computer Library Center, Inc., Dublin, Ohio.
REPORT NO OCLC/OPR/RR-82/1
PUB DATE 15 Jun 82
NOTE 54p.

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Computer Output Microfilm; Library Administration; *Library Automation; Library Collections; Library Expenditures; Library Facilities; Library Personnel; *Library Services; *Library Surveys; *Public Libraries; Public Television; Videotex
IDENTIFIERS Library Funding; *Library Statistics; Library Users; Public Radio

ABSTRACT

This analysis of data from major library studies provides a wide range of information on public libraries in America in the 1970's. Following a discussion of the history and stated purpose of American public libraries, figures are presented for library size, population served, area served, governing bodies, financial support, revenue allocation, facilities, collection size, personnel employed, patron loans, reference services, interlibrary lending, and attendance by members of the public. A review of technology applications in public libraries includes discussion of public radio and television broadcasts, videotex, computer output microfilm (COM) catalogs, and automated services in the following areas: cooperative cataloging, circulation control, interlibrary lending, reference transactions, acquisitions, serials control, provision of automated film bookings, adoption of online public catalogs, provision of public access microcomputers, and use of computer-assisted instruction (CAI). A summary profile of typical American public libraries is provided. (Author/ESR)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED221222

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Report Number: OCLC/OPR/RR-82/1
1982: June 15

Research Report

on

# The American Public Library

by

Donald J. Sager

OCLC
Office of Research
5565 Frantz Road
Dublin, OH 43017

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Lois Yoakam

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

IR 050 000

The Research Report Series is OCLC's formal dissemination vehicle through which OCLC research project results can be made public.

OCLC Research Reports are published and distributed through OCLC, until the report is available from ERIC (usually six to nine months after publication). Up to three copies of reports not yet bearing an ERIC number are provided at no charge to interested persons and institutions. Requests for these reports should be directed to OCLC, Customer Installation and Services Section, 6565 Frantz Road, Dublin, OH 43017.

Research Report Series

Subject Heading Patterns in OCLC Monographic Records
by E. O'Neill and R. Aluri
Report Number: OCLC/RDD/RR-79/1; ERIC ED 183 167

An Overview of a Proposed Monitoring Facility for the Large-scale, Network-based OCLC On-line System
by W. Dominick, D. Penniman, and J. Rush
Report Number: OCLC/OPR/RR-80/1; ERIC ED 186 042

Analytical Review of Catalog Use Studies
by K. Markey
Report Number: OCLC/OPR/RR-80/2; ERIC ED 186 041

A Method for Correcting Typographical Errors in Subject Headings in OCLC Records
by E. O'Neill and R. Aluri
Report Number: OCLC/OPR/RR-80/3

Field, Subfield, and Indicator Statistics in OCLC Bibliographic Records
by T. B. Hickey
Report Number: OCLC/OPR/RR-81/1; ERIC ED 202 484

Development of a Probabilistic Author Search and Matching Technique for Retrieval and Creation of Bibliographic Records
by T. B. Hickey
Report Number: OCLC/OPR/RR-81/2; ERIC ED 206 286

Survey of Online Searching Instruction in Schools of Library and Information Science
by C.H. Fenichel, and S.P. Harter
Report Number: OCLC/DD/RR-81/3; ERIC ED 210 038

The American Public Library
by D. Sager
Report Number: OCLC/OPR/RR-82/1

## ABSTRACT

The author analyzes data from major library studies concerned with various features of the American public library. The report surveys a range of information, profiling the American public library's size, population and area served, political jurisdictions, financial support, allocation of revenues, facilities, collections, personnel, patron loans, reference services, interlibrary lending, and attendance. The author also explores the use of newer technologies (automated services, bibliographic utilities, COM catalogs, and other applications) in public libraries. Some conclusions are drawn and some directions are cited both from the inspection of the data and from the author's experiences in public library administration.

TABLE OF CONTENTS


| | | |
|---|---|---|
| ABSTRACT | | v |
| 1. | Background | 1 |
| 2. | Purpose | 3 |
| 3. | Number of Libraries and Population Served | 4 |
| 4. | Political Jurisdictions | 7 |
| 5. | Financial Support | 9 |
| 6. | Allocation of Revenues | 14 |
| 7. | Facilities | 16 |
| 8. | Collections | 21 |
| 9. | Personnel | 23 |
| 10. | Loans to Patrons | 25 |
| 11. | Reference and Directional Service | 27 |
| 12. | Interlibrary Loan | 28 |
| 13. | Attendance | 29 |
| 14. | Use of Newer Technology | 30 |
| | Computer Output Microfilm Catalogs | 33 |
| | Online Cooperative Cataloging | 34 |
| | Circulation Control | 35 |
| | Online Interlibrary Loan | 36 |
| | Online Reference Service | 37 |
| | Acquisitions | 38 |
| | Other Automated Applications | 39 |
| 15. | Summary | 39 |
| 16. | Notes | 43 |

# THE AMERICAN PUBLIC LIBRARY

## 1. BACKGROUND

At the time this nation was founded in 1776, there were only 29 public libraries, and they held a total of 45,623 volumes.(1)* One hundred years later, this number had slowly grown to 358, although a host of society and subscription libraries also existed which served as the predecessors for public libraries in many towns and cities throughout the United States.(2)

In 1977-78 the National Center for Educational Statistics estimated there were 8,456 public libraries in the United States.(3) The American Library Directory's 34th edition (1981) cites 8,872,(4) while the Chief Officers of State Library Agencies' last survey report in 1977 indicated there were 10,134 public libraries of all sizes throughout the nation.(5)

Amid the wealth of statistics and information regarding the American public library, there is also considerable myth and misinformation. It is the purpose of this paper to provide some background on this institution, which may be of help to those who serve the public library, as a basis for planning. While some historical facts will be cited, the emphasis will be upon what is currently known about the public library and its impact upon the American people. Some occasional references will be made to studies performed involving public libraries in other nations as a basis for comparison, but the major thrust will be the role and activities of the public library in this nation.

Legend is that the public library is primarily an American invention, and that the father of this institution is Benjamin Franklin. While we must credit Franklin with much of the initiative for establishing one of the earliest subscription libraries in Philadelphia in 1732, there is nothing in

*Numbers in parentheses refer to notes at end of report.

the historical record which would indicate that he visualized a library, supported by public taxation, which would provide resources and information to everyone.(6) Even if he had, there were other libraries in this country and in other nations which had been founded on that principle much earlier.

In 1697, at the port of Annapolis, Maryland, Governor Nicholson had proposed that the King allocate part of the money granted toward arms and ammunition for the purpose of establishing a free public library, "permitting all persons desirous to study or read the books, and to have access thereto under proper restrictions."(7)

Tax-supported public libraries were not an overnight sensation. Libraries certainly proliferated during the early half of the 18th century in America, but primarily through bequests, donation, subscription or the common needs of selected social classes. Two examples of early public libraries were the Redwood Library in Newport, Rhode Island, and the Loganian Library in Philadelphia.

Abraham Redwood was a wealthy merchant at the time Newport was a city of some prominence. (New York was described at this point in history as "being near Newport.")(8) In 1747 he donated £500 sterling, a handsome sum in those days, to build and endow "a public library of all arts and sciences" for that community.(9) The facility fell into disrepair during the American Revolution but was restored with the reascendency of Newport as a social retreat.

The Loganian Library had its origins with James Logan, another wealthy tradesman who donated his private collection of 3,000 volumes, a building, and sufficient income to support a librarian and to purchase books. The intent was to provide resources which would be available to all. The Library performed its services with some distinction but finally experienced difficulty because of the nature of its governance. Trustees of the library were hereditarily appointed, as was the position of librarian. As the family line dwindled, it became necessary to transfer holdings to the Philadelphia Library Company.

Some of the subscription libraries were liberal in their policies. The Philadelphia Library Company founded by Franklin granted the public free access to the collections, but only members were allowed to actually borrow the books.(9) Some exceptions would occur. In 1776, for example, the Philadelphia Library Company extended borrowing to "gentlemen meeting for a congress in the city with such books as they may have occasion for during this sitting."(10) There were some inconsistencies in their policies. When the British occupied Philadelphia in 1777-78, they had to pay for the privilege of using the collection.(11)

While the fees charged by many subscription libraries varied considerably depending upon the incorporators and the quality of the bookstock, it still represented a barrier to the casual user. The Mercantile Library Association of Baltimore provides an example. Originally established in 1839 by five clerks who had sought "a place of evening resort above the level of the oyster house or theater," by 1875 the library held 31,032 volumes.(12) Membership was placed at $5 per year, which may seem modest until it is recognized that

5¢ would purchase a very good meal in those days. Special rates were available for those of greater permanence in the community. Life membership could be obtained for $50. A unique challenge for the library staff may have existed in serving those who took advantage of perpetual membership at $100.

One of the landmark documents in American public library history was the publication of Public Libraries in the United States of America in 1876 by the U.S. Bureau of Education. The volume actually contained a wealth of important information regarding almost all types of libraries in the U.S. at that time. As of 1875, 3,682 libraries were reported existing in the nation, possessing 12,276,964 volumes and approximately 1 1/2 million pamphlets.(13)

As late as 1850 there is evidence the government had been embarrassed by its inability to tabulate accurate information on American libraries. An inquiry in that regard from the United Kingdom to the Secretary of State had to be returned without satisfaction, and that may have stimulated efforts to correct the deficiency.(14) The eminent C.C. Jewett attempted to describe all public libraries in 1857,(15) and Rhees published his Manual of Public Libraries in 1859, which contained a list of 2,902 "public" libraries. The census also attempted to count the number of libraries and volumes during this period, but inconsistency in defining and reporting made these statistics meaningless.(16)

The 1876 report by the U.S. Bureau of Education provided a more thorough foundation for subsequent comparison, and separated and defined public libraries as "all libraries open to the public without charge or for a nominal fee only."(17) Despite that initiative, years passed before statistics on public libraries began to be more thoroughly collected on a national basis. Today, the National Center for Educational Statistics (NCES) provides a solid source of information on this institution, and its most recent Library General Information Survey: Public Libraries (LIBGIS) provides the basis for much of the current information which follows. (Technical note: LIBGIS statistics are based on a complete survey of all libraries of a specific size, and a stratified random sampling of others. LIBGIS III, for example, derived its statistics from a survey of all (334) public libraries serving 100,000 or more people and 1,171 randomly selected libraries serving different size populations.)

## 2. PURPOSE

The purpose of the public library and its role in American society has more often than not been taken for granted at various stages in its history. The function and value of many of the early institutions apparently was self-evident to the founders, for the charters simply reflected the intention of the donors or of the governance to provide library service with varying degrees of access. The 1876 survey published by the U.S. Bureau of Education visualized a greater educational role, and stated in the introduction that the "influence of the librarian as educator is rarely estimated by outside observers, and probably is seldom realized even by himself."(18)

A recent draft statement of principle proposed by a special task force of the Public Library Association defines that role more elaborately and reveals the expanding responsibilities of the institution today.

> Without regard to race, citizenship, age, education level, economic status, or any other qualification or condition, public libraries freely offer access to their collections and services to all members of the community. The ideas and information available through public libraries range the entire spectrum of knowledge and opinions. The uses made of the ideas and information are as varied as the individuals who seek them. Only the public library offers that unique opportunity for each person by providing an open and non-judgmental environment in which the individual and his interests are brought together with the universe of ideas and information. No other institution provides this service for the American people.(19)

The 542-word statement further discusses the function of the public library to ensure free access, reviews the varying clientele that should be served, describes the variety of resources and services that should be provided in modern society, and concludes that "public libraries continue to be of enduring importance to the maintenance of our free democratic society. There is no comparable institution in American life."

While much has been written regarding the role of the public library and the changing purpose of this institution in American society, today the Public Library Association recommends that each library define its own purpose, based on careful analysis of the needs of the community.

## 3. NUMBER OF LIBRARIES AND POPULATION SERVED

In 1977-78, American public libraries operated 70,956 outlets, which included 8,456 central libraries, 6,527 branch libraries, 49,343 bookmobile stops, and 6,630 miscellaneous units, according to the most recent LIBGIS survey (LIBGIS III) conducted in 1977-78.(20) The previous survey in 1974 listed 8,307 public libraries with 89,142 outlets which included 8,023 central libraries, 6,240 branch libraries, 65,965 bookmobile stops, and 8,914 miscellaneous units.(21)

Growth in the number of public libraries was 1.8% during the four-year interval between the surveys, with marked decrease in the number of bookmobile stops and miscellaneous extension units and stronger growth in branches and central libraries (4.6% increase in the number of branch libraries). Total decrease in outlets during this period was 20%.

Estimating the number of people served and unserved by public libraries in the U.S. is difficult. The service area of some public libraries is uncertain, and residency requirements may be waived depending upon the policies of individual boards. Some states have established regional

libraries which may theoretically serve the entire state, but which may actually leave vast sections devoid of a service unit. Nonetheless, statistics reported by state library agencies in the most recent American Library Directory (22) would indicate that there are 6,433,633 people without public library service in the U.S. Putting it another way, American public libraries serve 220,071,192 people, or 97.2% of the population, using the 1980 census figures.

There is an assumption that the public library is predominately an urban institution, and while that depends upon how the word "urban" is defined, the statistics reveal that the majority of public libraries tend to exist in towns or population centers of under 10,000, as the following table relates:

| Population Served | Number of Library Systems(1978) |
|---|---|
| 500,000 & over | 54 |
| 250,000-499,999 | 61 |
| 100,000-249,999 | 219 |
| 50,000-99,999 | 444 |
| 10,000-49,999 | 2,176 |
| Under 10,000 | 5,502 |

(Source: Preliminary Report from NCES: LIBGIS III)

When total outlets (central libraries, branches, bookmobile stops, etc.) are tabulated, the picture changes somewhat, but there is still a significant percentage of library service outlets in the smaller and medium-sized population centers:

| Population Served | Number of Library Outlets(1978) |
|---|---|
| 500,000 & over | 6,149 |
| 250,000-499,999 | 4,663 |
| 100,000-249,999 | 13,310 |
| 50,000-99,999 | 14,525 |
| 10,000-49,999 | 23,100 |
| Under 10,000 | 9,209 |

(Source: Preliminary Report from NCES: LIBGIS III)

It has been estimated that 70% of the American population lives in what the U.S. Bureau of the Census has defined as Standard Metropolitan Statistical Areas (SMSA).(23) These are general areas of population concentration centering around either a city of 50,000 or larger, or a somewhat smaller city with a population density approaching 75,000. Latest statistics do not indicate that SMSAs are where the largest number of public library outlets exist:

| Metropolitan Status | Total Outlets(1978) |
|---|---|
| All public libraries | 70,956 |
| Within SMSA, central | 18,403 |
| Within SMSA, other | 12,981 |
| Other than SMSA | 39,572 |

(Source: Preliminary Report from NCES: LIBGIS III)

(Technical note: the NCES defined libraries as "Within SMSA, central" if they were coterminous or within the boundaries of a central city. If the library was located within a county defined by the Bureau of Census as part of an SMSA, but not in the first category, it was defined as "Within SMSA, other." Thus, libraries "Within SMSA, central" would be urban libraries and those suburban libraries bordering on the city. Libraries "Within SMSA, other" would be primarily suburban, and libraries "Other than SMSA" would be primarily rural.)

Since it might be misleading to consider deposit stations, bookmobile stops, and other miscellaneous units as full-service library outlets, a tabulation of only central libraries and branches might be more revealing:

| Population Served | Central and Branch Libraries(1978) |
|---|---|
| All libraries | 14,983 |
| 500,000 & over | 1,571 |
| 250,000-499,999 | 807 |
| 100,000-249,999 | 1,565 |
| 50,000-99,999 | 1,453 |
| 10,000-49,999 | 3,547 |
| Under 10,000 | 6,040 |

(Source: Preliminary Report from NCES: LIBGIS III)

The sheer number of facilities is no valid indicator of their impact upon the American public, of course, and further on in this paper we will review size of collections, circulation, and reference usage, among other measurements. Nonetheless, the typical public library is likely to serve a community of less than 10,000, and that is important to realize as a foundation for understanding this institution, its needs and its future.

## 4. POLITICAL JURISDICTIONS

There is no universal form of governance for the American public library. Some are under the direction of appointed or elected citizen boards of varying sizes, while others fall under the jurisdiction of city or county administrators, mayors, or councils. There are as many different types of public libraries as there are political jurisdictions in the U.S.

There is no current accurate tabulation of the number of public libraries with either elected or appointed boards, nor is there a breakdown by political jurisdiction. However, a survey entitled Public Employment in 1978, prepared by the U.S. Bureau of the Census, may provide some approximation.(24) This survey reported 91,477 full- and part-time employees in local public libraries. Fifty-two percent or 47,739 were employed by municipalities; 25.5% or 23,281 worked for counties; 13.7% or 12,499 served special library districts; 7.8% or 7,180 were employed by townships; 1% or 778 were under the jurisdiction of school districts. Because of the varying size of these institutions, this does not provide an indication of the number of public libraries under each political jurisdiction. It does, however, provide some indication as to which jurisdictions invest the most tax dollars in local public library service, since salaries constitute between 50 and 60% of most public library budgets, as statistics later in this paper will reveal.

Another survey conducted by the International City Management Association in 1977 of 2,478 U.S. cities provides some additional insight on the most common political jurisdictions of American public libraries.(25) Responding to the instruments were 1804 cities, and of that number, 891 (49% of the total) indicated that the local public library was a municipal entity. The balance reported that the library fell under a variety of jurisdictions, with county government being the most common, following city government.

Based on these two surveys, it would be reasonable to assume that the city and the county represent the most common political jurisdictions for public libraries in the U.S., followed by special library districts, regional and multicounty units, townships and school districts, although not necessarily in that order. State law will significantly affect how libraries increase and define their options relative to political jurisdictions. Two midwestern states of approximately equal populations, Illinois and Ohio, serve to illustrate this. For many years, Ohio had approximately 250-260 public libraries, primarily because state law prohibited the creation of additional units in cities under a specified population level, due to the nature of library financing at the county level. Illinois law, in contrast, does not have that limitation, and as a result, that state has more than 500 public libraries. The majority of those institutions, however, serve populations of 5,000 people or less. Ohio public libraries number half of the Illinois total, but the average population they serve is much higher.

The most common form of public library governance within these political jurisdictions is the appointed citizen board. The size of the boards may vary considerably, but typically they range in number from 7-12 members, and they are appointed for terms of specific length by the chief elected officer or officers of the entity they serve. For example, the mayor appoints the trustees of the municipal library, and the members of the elected school board appoint the members of the school district library board. Where special library districts exist, the trustees may be directly elected by the public.

These boards are given either specific authority under local statutes or ordinances, or powers prescribed by state law, and sometimes both. It is generally conceded that these boards are policy making, and they are granted budgetary powers and authority to plan for the delivery of services to their community. Usually taxing powers are in the hands of elected officials, but in some states certain dedicated taxes exist for libraries, which may be drawn upon by the library board. In addition to these responsibilities, the board typically hires an administrator and delegates the day-to-day operations of the institution to that person.

Not all boards are policy-making. Some are merely advisory. This practice is common in those cities or counties where the library falls under the jurisdiction of the city or county administrator. In addition, some library boards are independent of government in a legal sense. These may be "association" libraries that were created under the terms of a will or through some other instrument. The boards may be self-perpetuating, appointing their own successors and setting their own policies regarding length of service. The New York Public Library and the Public Library of Youngstown and Mahoning County are two examples, among many. The trustees of these libraries may be dependent for their support on appropriations granted from local government. They may be entirely supported by an endowment, or they may rely upon a combination of public appropriations and private income. The latter is more common today as the cost of maintaining libraries has generally exceeded revenues from older endowments.

While there is no evidence regarding the relative effectiveness of any form of public library governance, there are two contradictory trends which may influence the future of library governance. The first is a tendency toward centralization of certain functions and services. At one time the Minimum Standards for Public Library Systems (26) promoted larger units of service with the end of consolidating smaller, less efficient units into county or multicounty units to benefit from the economies of scale. This reflected the influence of the consolidations of many school districts in the 1960s and 1970s and the creation of special-purpose authorities in major metropolitan areas.

Concurrent with that trend was the effort of the federal government to promote greater citizen involvement in government and a decentralization of decision making. Many advisory functions were created in all levels of government to promote greater responsiveness to community change and to aid in better informing the community of governmental services.

Today, the Public Library Association no longer promotes the use of the standards as contained in Minimum Standards for Public Library Systems primarily because these standards are based on inputs rather than outputs. A key element of its current Planning Process for Public Libraries (27) is the use of participatory models employing staff, board, and representatives of the community to arrive at goals, objectives, and strategies appropriate to each community. However, stress is still being placed upon cooperation between public libraries, as well as other libraries, for more effective utilization of resources.

It is quite likely that multiple levels of public library governance will emerge dependent upon specific needs in the future. The need for financing and administering complex applications of newer technology, for example, could see the creation of special authorities either through legislative initiative or more likely through local contractual agreement.

One element that can be determined more readily in the governance of public libraries is the nature of the library board. Whether the board is policy making or advisory, there is little doubt regarding its composition. Library boards are not representative of the communities they serve. Traditionally, the library board has a much higher percentage of business and professional people, and rarely are students or youth in general appointed to these bodies, even though they may constitute a high percentage of both the general population and the library's users.

## 5. FINANCIAL SUPPORT

Total receipts for all public libraries reported in LIBGIS III for the 1977-78 fiscal year were $1,563,307,041. Of that amount, 74.9% came from local taxes. State funds constituted 6.6% of those revenues, federal funds constituted 7.9%; and miscellaneous sources of income such as fees, fines, and donations represented 10.6%.(28)

This compares with a total revenue of $1,158,825,000 reported in 1974,(29) for a total growth in revenues of 34.9% during the three-year period between the surveys. That may seem impressive until we examine the impact of inflation. The Consumer Price Index in 1974 was at 147.7 and at 181.5 in 1977, and the value of the American dollar was $.677 in 1974 and only $.551 in 1977, according to the U.S. Bureau of Labor Statistics.(30) Converting the revenues for public libraries during those two years into real dollars, total actual income rose only 9.8% in three years.

Distribution of this income was somewhat lopsided, with almost one-third of total revenues going to 54 public libraries serving populations of 500,000 or over. Those institutions also received the lowest percentage of their income from local taxes.

| Population Served | No. of Libs. | Total Receipts(1977) | Percentage |
|---|---|---|---|
| 500,000 or more | 54 | $485,433,645 | 31.0 |
| 250,000-499,999 | 61 | 151,053,039 | 9.7 |
| 100,000-249,999 | 219 | 224,641,340 | 14.4 |
| 50,000-99,999 | 444 | 208,906,126 | 13.4 |
| 10,000-49,999 | 2,176 | 369,055,284 | 23.6 |
| Under 10,000 | 5,502 | 124,217,607 | 7.9 |

(Source: Preliminary Report from NCES: LIBGIS III)

The percentage of income from local, state, federal, and other sources shifts depending upon the size of the population served and provides some indication of the importance of these sources upon individual categories of libraries in 1977.

| Population Served | % Local Funds | % State | % Federal | % Other |
|---|---|---|---|---|
| 500,000 or more | 67.2 | 9.8 | 9.0 | 14.1 |
| 250,000-499,999 | 85.1 | 5.5 | 4.9 | 4.6 |
| 100,000-249,999 | 79.3 | 5.7 | 10.4 | 4.7 |
| 50,000-99,999 | 75.6 | 5.4 | 6.8 | 12.2 |
| 10,000-49,999 | 78.4 | 3.9 | 7.1 | 10.6 |
| Under 10,000 | 73.1 | 7.8 | 6.5 | 12.6 |
| All libraries | 74.9 | 6.6 | 7.9 | 10.6 |

(Source: Preliminary Report from NCES: LIBGIS III)

One factor which skews the statistics on state funds for libraries in the 250,000-499,999 population category is that a fairly large number of cities of this size are in states with little or no state aid for library service. The Urban Libraries Council reported in 1979 that 37 states provide direct grants to public libraries, and this amounted to a total of $154,000,000 in that year.(31) The largest amount was provided by New York, which allocated $34,000,000 to local libraries.

The percentage of income by source has not significantly changed since the last LIBGIS survey, when statistics revealed that 76% came from local taxes, 7% from the state, 7% from federal government, and 10% from miscellaneous sources.(32) There is a slightly greater emphasis upon income from federal and other sources, and a slight lessening from local and state government.

The major sources of federal funds for public libraries are General Revenue Sharing and the Library Services and Construction Act (GRS and LSCA). During the period from fiscal year 1974-77, total revenues for public libraries were $204.9 million under LSCA, and $354.95 million under GRS.(32) Originally the introduction of GRS was viewed with some suspicion by the library profession because it was felt that shifting decision making from the federal to the local level in the allocation of these funds would result in substantial loss to public libraries. LSCA was in fact reduced because of

this legislation, initially introduced under Nixon, and it has remained relatively stable since that time. The suspicion that libraries would suffer under GRS appears to be unfounded in view of the experience of the first four years, when GRS allocations to local libraries exceeded LSCA by 73%.(33)

It should be noted, however, that libraries were one of eight priority areas originally specified in the legislation, and these priorities were subsequently broadened and then eliminated in the legislation. Furthermore, some GRS funds have substituted for local funds. Research into the percentage of new dollars actually received by public libraries, based on a linear regression prediction model, has revealed that 65% of GRS was new and 35% was substituted for local funds.(34)

As recently as 1979, local public libraries have generally been estimated to receive 1% of local governmental revenues for their operation.(35) More recent studies contest this and indicate that the percentage is not only much smaller, but significantly decreasing. Federal statistics indicate that public libraries received only .56% of total state and local general revenues in 1968, and this amount had declined to .461% in 1977.(36) In contrast, local allocations of GRS to public libraries averaged 1.24% during the period from 1973 to 1977, which would indicate that libraries received a greater percentage of this federal revenue channeled through local government than would be their normal share of total governmental expenditure.(37)

LIBGIS III reported that total federal receipts by local public libraries in 1977-8 was $122,816,975.(38) The largest single portion came from GRS, namely $57,881,945 or 47.1% of the total. Of that amount, $39,997,740 or 69.1% of all GRS received went for operating purposes, while the balance of $17,884,205 went for capital purposes. LSCA was the next single largest source of federal funds for local libraries. From that source, local libraries received 24.2% of all federal funds, or $29,780,213. The balance of federal funds, consisting of $35,154,817 or 28.6% of the total, came from a variety of other federal programs.

Detailed breakdown of the distribution of these funds for 1977 is as follows:

| Population of Area Served | No. of Libs. | Total Federal Receipts | Total General Revenue Sharing | Total LSCA Funds Received | Total Other Federal Funds |
|---|---|---|---|---|---|
| 500,000 or more | 54 | $43,493,358 | $25,435,470 | $8,644,799 | $ 9,413,089 |
| 250,000-499,999 | 61 | 7,342,621 | 2,834,554 | 2,304,999 | 2,203,068 |
| 100,000-249,999 | 219 | 23,407,521 | 5,687,705 | 9,312,011 | 2,203,068 |
| 50,000-99,999 | 444 | 14,254,042 | 7,893,570 | 3,356,045 | 3,004,427 |
| 10,000-49,999 | 2,176 | 26,196,275 | 9,167,980 | 5,471,316 | 11,556,979 |
| Under 10,000 | 5,502 | 8,123,158 | 6,862,666 | 691,043 | 569,449 |

(Source: Preliminary NCES Report: LIBGIS III)

Distribution of federal funds during this reporting period was primarily to those public libraries in the central SMSAs. Fifty-seven percent of all federal funds, including 57.2% of all GRS and 47.2% of all LSCA went to libraries in this category. In addition, only 6.2% of all GRS funds received by libraries serving more than 500,000 people went for capital purposes, while 41.9% of all GRS funds received by libraries under 10,000 population went for that purpose. Another interesting fact is that the greatest success experienced by public libraries in tapping other sources of federal funds appears to be suburban and rural libraries serving populations of between 10,000-49,999. They accounted for 24.3% of all funds in that category.

Not all of the local, state, and federal revenues were devoted to operating expenditures such as salaries and library materials, and not all revenues were expended. Of the $1,563,307,041 received by libraries in FY77, $1,467,891,458 or 93.5% was expended.(39) Of the total expended, $108,260,591 or 7.96% was for capital purposes. This compares with $94,651,000 for capital purposes in the previous 1974 survey, which amounted to 9% of total expenditures,(40) an increase in funds but a decrease in percentage of expenditure.

There was some significant difference in the various categories of libraries relative to the percentage of receipts expended:

| Population of Area Served | Total Expenditures(1977) | % of Revenues |
|---|---|---|
| 500,000 & over | $425,760,353 | 96.1 |
| 250,000-499,999 | 139,074,045 | 95 |
| 100,000-249,999 | 195,928,153 | 91 |
| 50,000-99,999 | 176,431,271 | 93.2 |
| 10,000-49,999 | 323,115,159 | 89.7 |
| Under 10,000 | 99,321,886 | 87.2 |

(Source: Preliminary NCES Report: LIBGIS III)

There are many reasons why total revenues would not be expended, and there is provision in many state library laws for public libraries to reserve a portion of their income for contingencies or for transfer to special capital accounts. It is more typical among smaller libraries to prepare for major capital expenditures such as construction or automation by transferring a portion of their budget each year to a special account. Larger libraries more typically have other financing alternatives they can employ, such as drawing upon the bonding powers of their counties or municipalities. In any event, it would be misleading to look at the equipment or capital improvement budget of a public library and conclude that is all that would be available for capital expenditure, since many libraries are likely to have reserve funds for that purpose.

Among the most common measures of the adequacy of public library support is per-capita income. A large budget does not necessarily indicate a library is well supported, particularly if it has a large population to serve.

Unfortunately, it is difficult to obtain an accurate current figure for average per-capita library support, particularly because of the differences in the cost of living from one part of the nation to another. Nonetheless, some approximation can be made by taking the estimated population of the U.S. at the time of the 1977-8 LIBGIS III survey, subtracting the percentage of the population which was unserved at that time, and dividing that into the total revenues reported for that year. Using that method, the average per-capita support for public libraries in 1977-8 was $7.30.

LIBGIS III does not provide per-capita figures for income, but uses expenditures as the basis for its report within specific ranges. The differences in levels of support are important as a basis for understanding the range of services offered by these institutions.

| 1977 Per-Capita Support | 500,000+ | 250,000-499,999 | 100,000-249,000 | 50,000-99,999 | 10,000-49,999 | Under 10,000 |
|---|---|---|---|---|---|---|
| Less than $1 | 1(1.9) | - | 9(4.9) | 13(2.9) | 103(4.7) | 394(7.2) |
| $1-2.99 | 1(1.9) | 5(8.2) | 24(11) | 93(20.9) | 324(14.9) | 1,264(23) |
| $3-4.99 | 7(13) | 12(19.7) | 70(32) | 123(27.7) | 549(25.2) | 1,235(22.4) |
| $5-6.99 | 17(31.5) | 20(32.8) | 42(19.2) | 76(17.1) | 475(21.8) | 1,051(19.1) |
| $7-8.99 | 12(22.2) | 11(18) | 36(16.4) | 61(13.7) | 192(8.8) | 588(10.7) |
| $9-11.99 | 6(11.1) | 10(16.4) | 26(11.9) | 41(9.2) | 270(12.4) | 444(8.1) |
| $12-14.99 | 7(13) | 3(4.9) | 8(3.7) | 23(5.2) | 137(6.3) | 200(3.6) |
| $15 or more | 3(5.6) | - | 4(1.8) | 14(3.2) | 126(5.8) | 326(5.9) |

NOTE: Figures inside parentheses indicate % of all public libraries in each population level.

(Source: Preliminary NCES Report: LIBGIS III)

That same survey revealed that 520 (6.1%) of all public libraries had support of less than $1 per capita; 1,711 (20.2%) received $1 to $2.99 per capita; 1,996 (23.6%) received $3 to $4.99 per capita; 1,681 (19.9%) obtained $5 to $6.99; 900 (10.6%) obtained $7 to $8.99; 797 (9.4%) had $9.00 to $11.99; 378 (4.5%) received $12 to $14.99; and 473 (5.6%) received more than $15 per capita.

The previous average per-capita figure from the LIBGIS survey in 1974 was $5.22, including capital expenditures, and the median was $3.57.(41) By way of comparison, Public Library Statistics for 1975-6 for the 119 public library authorities in England and Wales was £3 per capita.(42)

The level of support changes markedly for libraries outside SMSAs. Of the 5,499 public libraries in that category in 1977, 2,521 (45.8%) spent less than $10,000 per year, and a majority of those institutions (2,490) serve communities of 10,000 or less.(43) In fact, 4,004 public libraries located outside SMSAs, which constitute 47.4% of all public libraries in the U.S. spend less than $50,000 per year in operating funds.

In contrast, of the 191 public libraries in 1977-8 that reported expenditures in excess of $1 million, 184 (96.3%) were located within an SMSA.

In summary, while a substantial percentage of American public libraries are located outside major metropolitan areas, these libraries tend to be poorly supported and serve populations of 10,000 or less. The 2,957 public libraries located in SMSAs, in contrast, represent only 35% of the total number, but tend to have higher levels of support. Of these urban or suburban libraries, 1,489 (50.4%) expend $5 per capita or more.

## 6. ALLOCATION OF REVENUES

There have been many fears that as inflation mounts and fiscal constraints increase, public libraries will be forced to curb their expenditures for materials and other services significantly. The LIBGIS III survey provides some reference point on how the public library allocated its expenditures in 1977.

| Population of Area Served | % for Salaries | % for Materials | % for Binding | % for Equipment | % for Plant | % for Other |
|---|---|---|---|---|---|---|
| All pub. libs. | 57.9 | 15.7 | .4 | 1.4 | 11.7 | 12.7 |
| 500,000 or more | 59.1 | 14.1 | .5 | 1.1 | 12.6 | 12.6 |
| 250,000-499,999 | 60.9 | 14.7 | .5 | 1.1 | 11.6 | 11.4 |
| 100,000-249,999 | 60.1 | 15.2 | .3 | 1.5 | 9.8 | 13.0 |
| 50,000-99,999 | 58.0 | 15.7 | .4 | 1.4 | 10.7 | 13.9 |
| 10,000-49,999 | 56.0 | 17.1 | .3 | 1.9 | 11.8 | 12.9 |
| Under 10,000 | 50.4 | 20.7 | .7 | 2.7 | 13.5 | 11.9 |

(Source: Preliminary NCES Report: LIBGIS III)

The last LIBGIS survey of 1974 reported that 58% of expenditures went for salaries, 16.2% went for library materials, 10% for plant, and 16% for other.(44) There does appear to be a significant change in the period between the two surveys, for it does appear that libraries are spending substantially

more for miscellaneous expense, somewhat less for materials, and significantly more for plant. There are also some major differences concerning the size of library. Libraries serving smaller communities (10,000 or less) expend significantly less for salaries and significantly more for materials.

The 1975-6 statistics collected for the 119 public library authorities in England and Wales indicated that 53% of their operating expenditures went for salaries, 20% for materials, and the balance for miscellaneous items such as equipment, plant, and rent.(45)

For many years library administrators have complained that the only areas of flexibility in their budgets have been personnel and materials, and that expenses such as utilities, rents, gasoline, and miscellaneous services have continued to steadily increase and erode the personnel and materials budget. It actually appears as if all portions of the budget, with some exceptions previously noted, have risen at approximately the same rate.

In terms of the differences in budgetary allocations between public libraries located in SMSAs and those located outside those areas, the percentage spread is virtually insignificant. The volume of expenditure is significantly different. As noted, 5,499 (65%) of all public libraries are located outside SMSAs, but their total operating expenditures represent only $239,878,297 (17.6%) of the $1,359,630,867 expended in 1977-8.(46)

Another area of some concern has been the relative impact of newer media upon the public library materials budget. With increased demand for microform and audiovisual resources, and substantially higher prices for periodicals, it has been assumed that less money would be available for books. LIBGIS III provides some data for evaluating these trends upon the library budget in 1977.

| Population of Area Served | % for Books | % for Periodicals | % for Microforms | % for AV&Misc. |
|---|---|---|---|---|
| All libraries | 12.7 | 1.5 | .3 | 1.2 |
| 500,000 or more | 11.1 | 1.4 | .3 | 1.3 |
| 250,000-499,999 | 11.6 | 1.5 | .3 | 1.3 |
| 100,000-249,999 | 12.1 | 1.5 | .3 | 1.3 |
| 50,000-99,999 | 12.7 | 1.5 | .3 | 1.2 |
| 10,000-49,999 | 14.2 | 1.5 | .3 | 1.1 |
| Under 10,000 | 17.7 | 1.9 | .1 | 1.0 |

(Source: Preliminary NCES Report: LIBGIS III)

The 1974 LIBGIS survey reported that libraries spent 14% of their budget for books, 1% for periodicals, .2% for microforms, and 1% for audiovisual materials.(47) It would therefore appear that the book budget has been affected by the increased emphasis upon audiovisual materials, but that the greatest impact has been in shifting more funds into the periodical budget at the expense of books. The percentages do not reveal this change as readily as the actual expenditures. Total funds spent for materials by public libraries in 1977-8 were $214,011,302,(48) and .5% represents $1,070,056. So while there is some shift in expenditures among public libraries during the period between the two surveys, it does not appear to be revolutionary. Expenditures for books by public libraries in 1977-8 were $173,083,219 compared with only $20,439,976 for periodicals and $16,703,133 for audiovisual and miscellaneous other materials.(49)

It is worth noting that the 54 public libraries serving populations of 500,000 or more spent $60,256,136 for materials in 1977-8, or 28.2% of the materials budget for all public libraries.(50) At the other end of the spectrum, the 5,502 public libraries serving populations of 10,000 or less purchased $20,597,311 or 9.6% of the total.

## 7. FACILITIES

One of the perplexing problems in public library service is determining the appropriate size community for the establishment of a central library, branch, or bookmobile service. Various formulae exist in the texts on public library administration, but they are usually based on the economics of operating those units, and not upon political realities or the unique requirements of various communities. For example, one would normally believe that a community of 10,000 would find one central library sufficient for its needs; yet the most recent LIBGIS statistics reveal that there are also 538 branch libraries in these communities in addition to 2,463 bookmobile stops and 706 other types of extension units.(51) A review of the total statistics from LIBGIS III may be of some value in identifying actual practice in the establishment of extension facilities and services in 1977.

| Population of Area Served | Central Libraries | Branch Libraries | Mobile Unit Stops | Other |
|---|---|---|---|---|
| All libraries | 8,456 | 6,527 | 49,343 | 6,630 |
| 500,000 or more | 54 | 1,517 | 3,769 | 809 |
| 250,000-499,999 | 61 | 746 | 3,278 | 578 |
| 100,000-249,999 | 219 | 1,346 | 10,506 | 1,239 |
| 50,000-99,999 | 444 | 1,009 | 12,072 | 1,000 |
| 10,000-49,999 | 2,176 | 1,371 | 17,255 | 2,298 |
| Under 10,000 | 5,502 | 538 | 2,463 | 706 |

(Source: Preliminary NCES Report: LIBGIS III)

"Other" library extension units are frequently book-deposit stations, special reading and study centers that may have limited staffing, or other unique collections which do not constitute full-service outlets for the

library system. The greatest number of these appear to exist in smaller communities where fiscal constraints may make it more difficult for the library to provide a full-service facility.

As might be expected, the libraries outside SMSAs provided a far higher number of bookmobile stops. A total of 28,855 or 58.5% of the 49,343 stops were offered to rural users. Thirty-five percent of all branch libraries (2,284) were located in rural areas, which would indicate that this type of agency is more typically an urban and suburban facility.(52)

Although a number of libraries in every category report bookmobile stops, this does not indicate that all libraries in that category own and operate these units. These libraries could have contracted for these services with other libraries, systems, or state libraries. The 1977 Survey of State Library Agencies identified 11 of 50 state libraries which operated 77 bookmobiles. Some of these units could have provided local library service as an alternative to acquiring such a vehicle.(53)

The frequency of branch libraries in communities of different sizes was reported in LIBGIS III, and that has significant comparative value:

| Population of Area Served | Branch Libraries (1978) Median | Mean |
|---|---|---|
| All libraries | - | 1 |
| 500,000 or more | 22 | 28 |
| 250,000-499,999 | 11 | 12 |
| 100,000-249,999 | 5 | 6 |
| 50,000-99,999 | 1 | 2 |
| 10,000-49,999 | - | 1 |
| Under 10,000 | - | - |

(Source: Preliminary NCES Report: LIBGIS III)

More insight to this issue may be gained by examining the total amount of floor space available for library service in different communities. LIBGIS III did tabulate the amount of net assignable square feet available in public libraries in 1978.

| Population of Area Served | Total Sq.Ft. | Median | Mean |
|---|---|---|---|
| All libraries | 79,917,817 | 2,757 | 9,451 |
| 500,000 or more | [illegible]74,530 | 240,000 | 316,195 |
| 250,000-499,999 | 6,514,390 | 93,026 | 106,793 |
| 100,000-249,999 | 10,541,854 | 40,890 | 48,136 |
| 50,000-99,999 | 10,119,311 | 19,500 | 22,791 |
| 10,000-49,999 | 21,629,387 | 7,522 | 9,939 |
| Under 10,000 | 14,038,345 | 1,650 | 2,551 |

(Source: Preliminary NCES Report: LIBGIS III)

The figure reported for floor space in the previous LIBGIS was 80,500,000 sq. ft. for 8,307 public libraries,(54) which would indicate that either there has been a slight decline in space between the periods, or that the figures may not be fully accurate.

There were marked differences between the number of extension agencies and the total amount of floor space available between public libraries located in SMSAs and in rural areas, as reported in LIBGIS III.(55) For example, floor space for libraries within the central SMSA had a median of 21,000 sq.ft. and a mean of 55,425 sq.ft., while suburban libraries in the SMSA had a median of 4,775 sq.ft. and a mean of 9,882 sq.ft. In contrast, the rural libraries had a median of 2,024 sq.ft. and a mean of 4,187 sq.ft.

Seating capacity will also provide some insight to the relative number of agencies and their size. LIBGIS III reported the following figures:

| Population of Area Served | Library Seating Capacity (1978) Median | Mean |
|---|---|---|
| All libraries | 38 | 84 |
| 500,000 or more | 1,700 | 2,275 |
| 250,000-499,999 | 701 | 822 |
| 100,000-249,999 | 299 | 392 |
| 50,000-99,999 | 165 | 176 |
| 10,000-49,999 | 72 | 93 |
| Under 10,000 | 25 | 31 |

(Source: Preliminary NCES Report: LIBGIS III)

Again, there was a marked difference in capacity between libraries within the SMSA, suburban areas, and rural areas. Median seating capacity for libraries in the central SMSA was 164, and the mean was 422. Public libraries within the SMSA but outside its central area had a median seating capacity of 56 and a mean of 84, while libraries outside SMSAs had a median seating capacity of 32 and a mean of 46.

Another element which will provide better understanding as to the nature of public library service would be the typical hours of service these institutions offer each week. Frequently the hours change from one season to another. For example, some public libraries reduce their hours in the summer to reflect the typical school year. Larger cities also have varying hours of service for different size branches, or to reflect the specific needs of individual neighborhoods. LIBGIS did collect data on the range of hours for public library service during a typical week in fall, 1978:

| Population of Area Served | Service Hours Per Week (1978) Under 20 | 20-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ |
|---|---|---|---|---|---|---|---|
| All libraries | 2,103 (24.9) | 2,378 (28.1) | 1,270 (15) | 1,154 (13.6) | 1,308 (15.5) | 198 (2.3) | 45 (.5) |
| 500,000 or more | - | 1 (1.9) | 2 (3.7) | 10 (18.5) | 34 (63) | 7 (13) | - |
| 250,000-499,999 | 1 (1.6) | - | 5 (8.2) | 7 (11.5) | 38 (62.3) | 10 (16.4) | - |
| 100,000-249,999 | - | 5 (2.3) | 13 (5.9) | 28 (12.8) | 126 (57.5) | 42 (19.2) | 5 (2.3) |
| 50,000-99,999 | 5 (1.1) | 9 (2) | 40 (9) | 77 (17.3) | 260 (58.6) | 38 (8.6) | 15 (3.4) |
| 10,000-49,999 | 30 (1.4) | 166 (7.6) | 410 (18.8) | 704 (32.4) | 746 (34.3) | 101 (4.6) | 19 (.9) |
| Under 10,000 | 2,067 (37.6) | 2,197 (39.9) | 800 (14.5) | 328 (6) | 104 (1.9) | - | 6 (.1) |

NOTE: Figures inside parentheses indicate % of all public libraries in each population level.

(Source: Preliminary NCES Report: LIBGIS III)

There is also a close correlation between hours of service and the location of the library inside or outside an SMSA. Sixty-eight percent of all libraries within the central SMSA were open from 50-69 hours per week. Sixty-one percent of all libraries within the SMSA but outside the central area were open from 40-69 hours per week. In contrast, more than 66% of public libraries located outside SMSAs were open fewer than forty hours per week.

There was a slight improvement in hours of service since the last LIBGIS survey in 1974. At that time only 3,600 of the 8,307 public libraries, or 43%, were open 40 or more hours per week.(56) The more recent survey reveals that 3,975 public libraries, or 47%, are now open 40 or more hours weekly.

By way of further comparison, a 1971 survey of 374 public libraries in England, representing 98% of the total, revealed that 1,589 (52%) of all static service points (central libraries, branches, deposit collections, etc.), which numbered 3,052, were open less than 10 hours per week.(57) Of the remaining 1,463 units, 10% were open between 10-14 hours per week, 19% were open 15-29 hours per week, 64% opened 30-59 hours weekly, and 6% offered 60 or more hours of service to their public weekly.

Another element of service is the number of days American public libraries are open each week. The 1876 survey on public libraries prepared by the U.S. Bureau of Education noted that during the few years preceding publication of the report, several public libraries in larger cities had opened their reading rooms to the public on Sundays. Boston, Worcester, Cincinnati, Chicago, and St. Louis were cited.(58) The results were reported successful, but according to the most recent LIBGIS survey, libraries which open seven days a week are still a minority. Only 8.1% or 688 libraries offer seven days of service.(59) A majority of 52%, or 4,399 libraries are open six days weekly. Of the balance, 15.7% or 1,329 are open five days, and 2,040 or 24.1% are open less than five days weekly.

The figures differ markedly for those libraries within and outside SMSAs. In the central SMSA, 27.1% of all libraries are open seven days weekly, with much higher percentages in libraries serving populations of 100,000 or more. Within the SMSA, but outside the central area, 14.6% of all libraries are open seven days weekly, but that percentage is significantly higher for libraries serving more than 10,000 people. Outside the SMSA, public libraries open seven days weekly constitute only 3%, and 61.4% of those libraries serving 10,000 or fewer persons are only open five days weekly or less.

There has been a significant improvement in these figures since the previous LIBGIS survey in 1974. At that time only 7% of the 8,307 public libraries were open seven days weekly, and 49% were open six days, compared with 8.1% and 52% reported in 1977-8.(60)

As with hours of operation, the days per week a library is open to the public are likely to change from one season to another and not be consistently applied for all agencies a library operates, particularly in a larger city. The statistics reported from LIBGIS III reflect information collected for the fall, 1978. Often libraries will reduce the number of days per week that they are open in the summer.

One final factor in evaluating facilities is the number of hours these agencies are open to the public daily. The most recent LIBGIS survey revealed that 61.1% or 5,168 public libraries offer on the average less than 8 hours of service daily.(61) A minority of 34.4% or 2,908 libraries are open from 8-10 hours daily, and only 4.1% or 345 libraries offer an average of 11-13 hours of service daily. Only 35 libraries or .4% offer more than 14 hours of service daily.

As with many of the other statistics, there is a significant difference between libraries within and outside SMSAs. Within the central SMSA, 67.9% of all libraries are open an average of 8-10 hours daily. Within the SMSA, but outside the central area, 49.9% of all libraries are open 8-10 hours daily. Outside the SMSA, 73% of all libraries are open less than 8 hours daily, and that percentage increases to 88% for libraries outside the SMSA that serve populations of less than 10,000.

No current information is presently available at the national level to determine how these hours are arranged. Typically, libraries vary their hours during the week and include some evening and morning service for the

convenience of their patrons. Some also periodically survey patron usage, as well as the community in general, to determine the best schedule for service. The realities of budget constraints, however, may force some compromise between the most desirable schedule and the hours the library can afford.

## 8. COLLECTIONS

American public libraries reported holdings of 439,485,643 books in 1977-8, together with 6,152,590 bound periodicals, 998,321 current periodical subscriptions, 15,285,872 units of microform, 9,060,346 sound recordings, 430,350 films and 29,650,807 miscellaneous materials.(62) LIBGIS III provides the following detail:

| Population of Area Served | No. of Libs. | Bookstock Volumes | Bookstock Titles | Period. Subs. | Micro-form | Recordings | Film |
|---|---|---|---|---|---|---|---|
| 500,000 or more | 54 | 100,728,777 | 17,802,271 | 179,688 | 9,790,895 | 1,885,170 | 179,688 |
| 250,000-499,999 | 51 | 36,570,626 | 10,214,112 | 54,499 | 1,574,071 | 568,503 | 59,276 |
| 100,000-249,999 | 219 | 58,301,786 | 18,691,094 | 95,835 | 1,544,245 | 1,093,299 | 77,025 |
| 50,000-99,999 | 444 | 54,113,420 | 25,570,394 | 122,875 | 845,595 | 1,289,504 | 65,104 |
| 10,000-49,999 | 2176 | 117,707,667 | 73,713,087 | 334,388 | 1,293,774 | 2,880,545 | 105,435 |
| Under 10,000 | 5502 | 72,063,367 | 45,983,667 | 211,036 | 247,292 | 1,343,325 | 15,965 |

(Source: Preliminary NCES Report: LIBGIS III)

Public library collections grew significantly since the previous LIBGIS survey. The 8,307 libraries reported 387,565,000 volumes in 1974, which would indicate that portion of the collection grew by 13.4% between the two survey periods.(63) In addition, there was a shift in the percentages of book holdings among different size libraries between the surveys. Libraries serving 500,000 or more held 24% in 1974 and 22.9% in 1977-8; those serving 250,000-499,999 held 8% in 1974 and 8.3% in 1977-8; libraries in the 100,000-249,999 category held 13% in 1974 and 13.3% in 1977-8; those in the 50,000-99,999 category had 13% in 1974 and 12.3% in the next survey; libraries serving 10,000-49,999 people had 25% in 1974 and 26.8% in 1977-8; and those serving less than 10,000 people had 17% in the first survey and 16.4% in the next one.

Growth in the collections can also be measured by additions to each of these collection categories. During 1977, American public libraries added 26,007,296 volumes (11,108,379 titles), 811,090 microform units, 636,649 sound recordings, 37,039 films, and 1,070,762 other materials.(64) In 1974, American public libraries reported adding 27,578,000 volumes (15,144,000 titles) which would indicate a decline of 5.7% in purchasing, in terms of volumes, and a 26.6% decline in terms of titles.(65)

The audiovisual holdings of public libraries also showed considerable growth between the two survey periods. Total holdings were reported to be 8,309,000 in 1974 and 9,490,696 in 1977-8, an increase of 14.2%, but there has

also been a notable decline in the rate of addition.(66) Libraries reported adding 922,000 audiovisual materials in 1974 and 673,688 in 1977-8. Despite the emphasis upon audiovisual services in public libraries during the past several decades, there does not appear to be any major shift in the nature of collections between the two survey periods. The 1974 LIBGIS survey found that approximately 2% of the public libraries' collection nationally was composed of audiovisual materials.(67) That same approximate percentage (1.9%) was evident in 1977-8.

Audiovisual resources do appear to be more common in SMSAs than outside them, particularly where films are concerned. Only 15% of public library films were located in libraries outside SMSAs in 1977-8.(68) Although not tabulated as audiovisual resources, microforms are also in limited supply outside SMSAs. Only 7.4% of all public library microform holdings are located outside SMSAs,(69) which would reflect the limited impact of this medium upon the smaller library which consitutes the majority of these insitutions.

The dramatic increase in periodical subscription prices during the past decade also appears to have influenced public libraries to become more selective. A total of 1,180,000 periodical subscriptions were reported by 8,307 public libraries in 1974.(70) This declined to 998,321 in 1977-8 despite an increase in the number of institutions.(71)

The relative size of book collections in American public libraries would be a valuable element in understanding the institution. LIBGIS III revealed that only 48 public libraries or .6% of the total held 1 million or more volumes.(72) On the other end of the spectrum, 4,701 libraries or 55.6% possessed fewer than 20,000 volumes.(80) The following table details that range:

Bookstock in Public Libraries (1977-8)

| Pop. of Area Served | No. of Libs. | Less than 20,000 | 20,000 to 39,999 | 40,000 to 69,999 | 70,000 to 99,999 | 100,000 to 299,999 | 300,000 to 599,999 | 600,000 to 999,999 | 1 million + |
|---|---|---|---|---|---|---|---|---|---|
| All libs. | 8,456 | 4,701 (55.6) | 1,571 (18.6) | 938 (11.1) | 483 (5.7) | 570 (6.7) | 113 (1.3) | 32 (.4) | 48 (.6) |
| 500,000+ | 54 | - | - | - | - | 1 (1.9) | 2 (3.7) | 11 (20.4) | 40 (74.1) |
| 250,000-499,999 | 61 | - | - | - | - | 5 (8.2) | 31 (50.8) | 18 (29.5) | 7 (11.5) |
| 100,000-249,999 | 219 | 3 (1.4) | 1 (.5) | 6 (2.7) | 6 (2.7) | 128 (58.4) | 71 (32.4) | 3 (1.4) | 1 (.5) |
| 50,000-99,999 | 444 | 10 (2.3) | 16 (3.6) | 47 (10.6) | 93 (20.9) | 273 (61.5) | 5 (1.1) | - | - |
| 10,000-49,999 | 2,176 | 271 (12.5) | 594 (27.3) | 760 (34.9) | 384 (17.6) | 163 (7.5) | 4 (.2) | - | - |
| Under 10,000 | 5,502 | 4,417 (80.3) | 960 (17.4) | 125 (2.3) | - | - | - | - | - |

NOTE: Figures in parentheses indicate % of all public libraries in each population level.

(Source: Preliminary NCES Report: LIBGIS III)

There were no libraries outside an SMSA that held more than 600,000 volumes, and 3,781 of the 5,499 libraries located outside SMSAs, or 68.8% had less than 20,000 volumes. Of the 48 libraries with collections exceeding 1 million volumes, 44 were located within the central SMSA, and the balance were in the SMSA, but outside the central area. Of the 2,349 libraries located within the SMSA, but outside the central area, 79.3% clustered with collections below 70,000 volumes. For libraries located in the central SMSA, 54.1% fell within the 70,000 to 599,999 volume range.

## 9. PERSONNEL

The major item of expense for all public libraries is personnel. The very smallest and largest libraries spend a majority of their total operating budgets on this element. LIBGIS III reports that there are a total of 93,335.1 full-time-equivalent (FTE) persons employed in public libraries, as of 1977-8.(73) That conflicts with Public Employment in 1978 published by the U.S. Bureau of the Census which estimated that local public libraries employed 66,000 full-time-equivalent (FTE) staff or a total of 91,000 full- and part-time employees.(74) That estimate was based on a determination that .8% of all local governmental employees worked in public libraries.

LIBGIS I in 1974 estimated that public libraries possessed a total staff of 86,000 FTE, or 118,000 full- and part-time employees, in the 8,307 libraries reported in the U.S.(75) Assuming that the LIBGIS figures are accurate, library staffing increased 8.5% during the period between the surveys, which would be at a rate substantially above the rate of growth of the American population (3.1%) for that same period.

At one time, one of the standards proposed for public libraries was provision of one full-time employee for each 2,000 population served.(76) This is no longer promoted because of current emphasis upon A Planning Process for Public Libraries, which stresses establishment of local goals and standards. However, the statistics contained in LIBGIS I and III might provide some evidence as to how close public libraries came to that original goal. Taking the estimated population of the U.S. in 1974 and subtracting the percentage of the population which was unserved at that time, and dividing that by the estimated total FTE employment in LIBGIS I, there was one library employee for 2,427 persons in that year. Using that same formula, adjusted for 1977-8, this had changed to one library employee (FTE) for 2,306 persons. By way of comparison, statistics for the 119 public library authorities in England and Wales for 1975-6 indicated there was one FTE library employee for every 2,284 persons.(77)

Detailed statistics on professional, technical, clerical and maintenance staff in public libraries as of 1978 (fall) are as follows:

| Pop. of Area Served | No. of Libs. | Total Staff (FTE) | Total Professional Staff (FTE) | Tech, Cler, & Other (FTE) | Total Maintenance Staff (FTE) |
|---|---|---|---|---|---|
| All libs. | 8,456 | 93,335.1 | 38,702.1 (41.5) | 48,208.9 (51.7) | 8,424.1 (6.9) |
| 500,000+ | 54 | 25,277.8 | 8,828.3 (34.9) | 14,043.6 (55.6) | 2,405.9 (9.5) |
| 250,000- | 61 | 8,758.5 | 3,468.5 (39.6) | 4,780.1 (54.6) | 509.9 (5.8) |
| 100,000- 249,999 | 219 | 13,200.7 | 5,087.6 (38.5) | 7,403.0 (56.1) | 710.1 (5.4) |
| 50,000- 99,999 | 444 | 12,862.0 | 5,196.0 (40.4) | 7,006.0 )54.5) | 660.0 )5.1) |
| 10,000- 49,999 | 2176 | 23,663.8 | 9,936.0 (42.0) | 12,295.5 (52.0) | 1,432.3 (6.1) |
| Under 10,000 | 5502 | 9,572.3 | 6,185.7 (64.6) | 2,680.7 (28.0) | 705.9 (7.4) |

NOTE: Figures in parentheses indicate % of all public library staff at each population level.

(Source: Preliminary NCES Report: LIBGIS III)

The previous LIBGIS survey reported that 38% of total staff was professional, 54% clerical, and 8% maintenance. This would indicate a significant shift toward increased professional staff in public libraries.(78) What is probably most striking about the statistics is that the very smallest public libraries appear to have the higher ratio of professional employees. It should be realized, however, that many personnel considered professional in smaller public libraries do not possess higher degrees but have assumed professional responsibilities and roles. Given that qualification, it remains significant that one-third of the large libraries' staffs are professional, while two-thirds of the smallest libraries' staffs are considered to fall into that category. The breakdown of staff for the 119 library authorities in England and Wales for 1975-6 was 31% professional, 57% clerical and 12% building staff.(79)

There are also some significant differences between libraries located in the central SMSA, within the SMSA but outside the central area, and libraries not located in an SMSA. The percentage of professional employees in rural libraries increases to 49.5%, compared with 38.1% in the central SMSA and 41% in suburban areas. Clerical and building staff are also highest in the central SMSA with 54% and 7.9% being the average for these institutions. Despite this difference, it is important to recognize that the 54 public

libraries serving populations of 500,000 or more employ 22.8% of all professional librarians in public libraries in the U.S.

The ratio between male and female employees reported in LIBGIS III was 15.9% male and 84.1% female,(81) a slight change from the 15% male and 85% female reported in the 1974 LIBGIS.(82) That ratio shifts dramatically among public libraries in the different population categories. The 1978 ratio was 25% male and 75% female in libraries serving areas of 500,000 or more population, and it declined to 2.3% male and 97.7% female in libraries serving under 10,000 people. There were also higher percentages of males employed in public libraries in SMSAs than in libraries located in rural areas.

The percentage of library staff possessing graduate degrees, averaging for all public libraries reported in LIBGIS III, was 53.5%. This percentage ranged from 76.5% in libraries serving 500,000 or more, down to 19% in libraries serving under 10,000 persons.(83) Libraries in the central SMSA averaged 64.5% graduate degrees, while suburban libraries averaged 57.6% and rural libraries were 30.4%.

## 10. LOANS TO PATRONS

American public libraries loaned 986,714,576 items to patrons in 1977-8, according the LIBGIS III.(84) That compares with 892,854,000 reported in LIBGIS I in 1974, and represents a growth of 10.5% in this usage during that period.(85) Of this usage, 43.8% occurred in the central SMSAs, and 29.5% in the suburban areas of the SMSAs. An estimated 70% of the American population lives in SMSAs and therefore, the aggregate percentage of 73.3% of total circulation appears to reveal no significant difference in this measurement of usage between urban and rural users.

Detailed circulation statistics for the different size libraries are as follows:

| Population of Area Served | No. of Libs. | Circulation (1977-8) | % |
|---|---|---|---|
| 500,000 or more | 54 | 207,282,331 | 21 |
| 250,000-499,999 | 61 | 94,212,821 | 9.5 |
| 100,000-249,999 | 219 | 140,256,132 | 14.2 |
| 50,000-99,999 | 444 | 142,948,293 | 14.5 |
| 10,000-49,999 | 2,176 | 276,413,613 | 28 |
| Under 10,000 | 5,502 | 125,601,386 | 12.7 |

(Source: Preliminary NCES Report: LIBGIS III)

What is revealing about this table is the fact that libraries serving populations of less than 50,000 account for 40.7% of all material loans. There is only a slight change in this distribution of usage since the last LIBGIS, which revealed that libraries serving 500,000 or more accounted for 22% of circulation; those serving 250,000 to 499,999 accounted for 10%;

libraries in the 100,000-249,999 category had 14%; libraries serving 50,000-99,999 had 15%; those in the 10,000-49,999 category had 27%; and those under 10,000 accounted for 12%.(86)

Circulation per capita can be calculated by taking the estimated U.S. population at the time of the survey, subtracting the estimated portion of the population not served by public libraries, and dividing that into total circulation. Employing this method, circulation per capita in 1974 was 4.28, and 4.58 in 1977-8. By way of comparison with other nations, a survey of 118 public library authorities in England and Wales in 1975-6 reported circulation of 11.4 per capita.(87) A 1977 survey of 464 public libraries in Finland revealed their circulation was 14 per capita.(88)

Another measure of significance would be turnover (i.e., circulation divided by total book collection). This is somewhat difficult to determine accurately, using available statistics, particularly since the book collections of most American public libraries are divided into reference or noncirculating items and circulating materials. No current statistics are available on the percentages that fall into each category. It is also generally assumed that larger libraries have greater percentages of their collections which are for reference or research use only. In addition, the circulation statistics contained in both LIBGIS I and III do not segregate circulation by types of materials (i.e., books, audiovisual materials, etc.) A 1977 survey by the International City Management Association of 800 municipal public libraries, however, revealed that 94% of the circulation in those institutions was composed of books, 4% was audiovisual resources, and 2% of circulation was other types of materials such as pamphlets.(89)

Given all those limitations, it is possible to arrive at a rough approximation of turnover in American public libraries by dividing the total book collection into circulation. In 1974, that turnover was 2.3 for all public libraries, and 2.25 in 1977-8. By comparison, a 1974-5 survey of Australian public libraries revealed a turnover of 4.31.(90) A survey of Danish public libraries in 1977 revealed a 2.6 turnover.(91) In 1976, Norwegian public libraries reported a turnover of 1.3.(92)

There were some variations in turnover, depending upon the size library. That can be seen by examining the statistics contained in LIBGIS III:

| Population of Area Served | No. of Libs. | Turnover |
|---|---|---|
| 500,000 or more | 54 | 2.0 |
| 250,000-499,999 | 61 | 2.58 |
| 100,000-249,999 | 219 | 2.41 |
| 50,000-99,999 | 444 | 2.64 |
| 10,000-49,999 | 2,176 | 2.35 |
| Under 10,000 | 5,502 | 1.74 |

(Source: Preliminary NCES Report: LIBGIS III)

There was a slight shift since the last LIBGIS.(93) In 1974, libraries serving 500,000 or more had a turnover of 2.2. Those serving 250,000 to 499,999 had 2.6. Libraries in the 100,000-249,999 category had 2.6. Those in the 50,000-99,999 bracket had 2.6. In the 10,000-49,999 range turnover was 2.4, and those serving communities of 10,000 or less reported 1.6.

A 1974-5 survey of Australian municipal public libraries revealed that turnover in that nation tended to increase depending upon the size of the population served.(94) They reported a turnover rate of 1.77 for libraries serving fewer than 2,000 people, increasing steadily to 6.03 for libraries serving cities of 200,000 to 500,000. A 1974 survey of 44 large urban libraries in the U.S. revealed how great the range of turnover can become.(95) Of these 44 systems, the highest turnover rate reported was 9.3 and the lowest was 2.2 with the median at 4.6.

There is also some variation between turnover rate within and outside the SMSA. The figures reported in LIBGIS III revealed that turnover was 2.25 in the central SMSA libraries, 2.39 in the SMSA but outside the central area, and 2.1 in those libraries outside the SMSA. The poorest turnover rate (1.64) was in those libraries serving 10,000 or less, located outside SMSAs. The best turnover rate (3.15) was among libraries serving populations of 100,000-249,999 located in SMSAs but outside the central area.

## 11. REFERENCE AND DIRECTIONAL SERVICE

LIBGIS III included statistics on reference and directional service provided by public libraries during a typical week in the fall of 1978. Total transactions during that week were 4,819,002, with 66.3% (3,050,371) consisting of reference questions and 36.2% (1,768,631) representing directional assistance.(96) Detailed breakdown is as follows:

| Population of Area Served | No. of Libs. | Total Transactions | Reference | | Directional | |
|---|---|---|---|---|---|---|
| | | | No. | % | No. | % |
| 500,000 or more | 54 | 1,795,849 | 1,437,386 | 80 | 358,463 | 20 |
| 250,000-499,999 | 61 | 369,832 | 217,682 | 58.9 | 152,150 | 41.1 |
| 100,000-249,999 | 219 | 575,711 | 255,605 | 44.4 | 320,106 | 55.6 |
| 50,000-99,999 | 444 | 606,883 | 424,286 | 69.9 | 182,597 | 30.1 |
| 10,000-49,999 | 2,176 | 1,028,768 | 493,884 | 48 | 534,884 | 52 |
| Under 10,000 | 5,502 | 441,959 | 221,528 | 50.1 | 220,431 | 49.9 |

(Source: Preliminary NCES Report: LIBGIS III)

The 54 major public libraries serving populations of 500,000 or more accounted for 37.3% of total transactions performed during that week, but 47.1% of all reference questions. Of particular significance is the very high proportion of reference-to-directional questions received by these larger institutions, compared with the ratio between reference and directional questions received by those libraries at the other end of the spectrum.

Libraries located in the central SMSA were also more likely to handle a higher proportion of reference questions. LIBGIS III reported urban libraries handled 74.6% reference and 25.4% directional questions, while that ratio was 53.8% and 46.2% among suburban libraries and 47.4% and 52.6% among rural libraries. There were some variations in that percentage depending upon the size of the library and community.

The ratio of reference staff to the volume of reference questions is another measurement of effectiveness. Unfortunately, it is not possible to arrive at that statistic using the LIBGIS figures, since reference staff are not separated from total staffing complement. A survey of 900 municipal libraries in 1977 conducted by the International City Management Association revealed that the ratio of reference questions to number of total staff was approximately 1,500:1, but this tended to vary depending upon the population of the community served.(97) Libraries serving communities of 10,000-25,000 averaged 600 reference questions per staff member, while those cities serving populations of between 500,000 and 1,000,000 averaged 2600 questions per staff member. A 1973 survey of 39 public libraries conducted by the Great Britain Department of Education and Science determined that those institutions experienced 3,089 reference questions per reference department staff member.(98)

It is difficult to determine the trends in public library reference usage because of an absence of comparative figures. Statistics on urban and suburban public libraries contained in the Bowker Annual provide some help, but not all of the libraries listed in that publication collect data on reference usage. Nonetheless, of 17 libraries reporting reference usage in 1975 through 1978, total increase in volume was 16.6%.(99)

## 12. INTERLIBRARY LOAN

Among the most dramatic changes reported in the LIBGIS statistics is the tremendous increase in the volume of interlibrary loan activity. In 1977-78, American public libraries loaned 3,911,720 items to other libraries and received 4,915,729 items from other libraries.(100) In 1974, those figures were 2,439,000 and 3,001,000 respectively.(101) That represents an increase of 62.2% in total traffic during the brief period between the two surveys. ILL traffic as a percentage of total circulation increased from .6% to .9% during that interim. Detail on ILL traffic among the different size libraries, as reported in LIBGIS III is as follows:

| Population of Area Served | No. of Libs. | ILL to Other Libs. Total | Median | Mean | ILL from Other Libs. Total | Median | Mean |
|---|---|---|---|---|---|---|---|
| 500,000 and over | 54 | 470,378 | 4,246 | 8,710 | 129,766 | 1,124 | 2,403 |
| 250,000-499,999 | 61 | 338,547 | 2,599 | 5,549 | 153,561 | 1,762 | 2,517 |
| 100,000-249,999 | 219 | 460,622 | 486 | 2,103 | 326,040 | 841 | 1,488 |
| 50,000-99,999 | 444 | 1,125,397 | 100 | 2,534 | 1,112,327 | 514 | 2,505 |
| 10,000-49,999 | 2,176 | 1,220,194 | 30 | 560 | 1,805,113 | 367 | 829 |
| Under 10,000 | 5,502 | 296,582 | - | 53 | 1,388,922 | 104 | 252 |

(Source: Preliminary NCES Report: LIBGIS III)

The highest volume of interlibrary traffic (loans to and from) occurred between libraries located in the central SMSA (38.5%), followed by ILL traffic in suburban areas (35%), and then ILL activity in areas outside the SMSA (26.4%).

Percentages of ILL traffic to and from public libraries as reported in LIBGIS I and III are as follows:

| Population of Area Served | ILL to Other Libs. LIBGIS I(74) | LIBGIS III(77-8) | ILL from Other Libs. LIBGIS I(74) | LIBGIS III(77-8) |
|---|---|---|---|---|
| 500,000 and over | 15% | 12.0% | 3% | 2.6% |
| 250,000-499,999 | 8 | 8.7 | 4 | 3.1 |
| 100,000-249,999 | 18 | 11.8 | 9 | 6.6 |
| 50,000-99,999 | 18 | 28.8 | 12 | 22.6 |
| 10,000-49,999 | 34 | 31.2 | 39 | 36.7 |
| Under 10,000 | 7 | 7.5 | 32 | 28.3 |

The dramatic shifts in ILL statistics in the middle population group could be due to several factors, such as the introduction of automated circulation systems, COM catalogs, or increased emphasis upon interlibrary lending to make greater use of area resources. Libraries at the extreme ends of the population spectrum appear to be least affected by these factors during this survey period. Traditionally, the larger libraries have been net lenders, and the institutions that have most relied upon ILL have been those institutions with the smallest collections. There does appear to be a shift away from reliance on larger libraries in the most recent survey, and a growing trend toward greater reliance upon the medium-sized libraries.

## 13. ATTENDANCE

Another statistic collected in LIBGIS III was total attendance during a typical week in fall, 1978. This measurement totalled 8,509,105 for all libraries.(102) Details for category of library are as follows:

| Population of Area Served | No. of Libs. | Total Attendance for the Week |
|---|---|---|
| 500,000 or more | 54 | 969,390 |
| 250,000-499,999 | 61 | 702,916 |
| 100,000-249,999 | 219 | 954,123 |
| 50,000-99,999 | 444 | 747,022 |
| 10,000-49,999 | 2,176 | 2,779,957 |
| Under 10,000 | 5,502 | 2,355,697 |

(Source: Preliminary NCES Report: LIBGIS III)

This statistic measures the general traffic the library experiences as well as attendance at meetings and cultural events held in the library during this period. There was a greater proportion of activity under this category for rural libraries. Total attendance in libraries located in SMSAs was 56.1% even though 70% or more of the population is located in SMSAs.

It would be difficult to determine whether attendance has increased or decreased since accurate national statistics for comparison are not generally available. There is some evidence which would indicate that adult and children's programs have increased in public libraries. A survey of 257 public libraries in Massachusetts in 1976-78 revealed that 78% were offering adult programs. The author of the study concluded that these programs had doubled in number from 1952 to 1978.(103)

A random national sample of 1,515 adults undertaken by the Gallup Organization in 1978 revealed that 18% of the 843 persons who indicated they had visited the library during the past year did so to attend a program sponsored by the library. These programs included films, lectures, or other planned events.(104)

## 14. USE OF NEWER TECHNOLOGY

Despite the existence of public radio and television for many decades and the explosion of computer and CATV applications during the past several decades, there is evidence that only a small percentage of public libraries have utilized these technologies. While these may no longer be appropriately labeled as "newer technology", they do constitute applications which have been commonly considered as promising means for public libraries to better serve their communities and more efficiently carry out their responsibilities to inform, educate, and enrich their patrons.

Of the 7,780 radio stations reported in the Carnegie Commission Report on the Future of Public Broadcasting in 1979, only 198 were listed as public (23

AM and 175 FM), and of the 1,008 television stations, only 280 were public.(105) What percentage of these stations were operated or used by public libraries was not stated, but it would be safe to assume that the number would be small.

Since public libraries are locally supported for the most part and the source of income for these stations is primarily state and federal, public broadcasting is more commonly offered by academic institutions or public school systems. Local government provided only 7.3% of the revenue for public television in 1977 and only 9.8% for public radio.(106) Yet the potential to reach a wider audience through this medium is impressive. Public television reached an estimated weekly audience of 29.8 million households in 1978, approximately 41% of all American households at that time.(107) While penetration for public radio was considerably smaller, 4.2 million persons weekly (only 2.4% of all households), it was still a significant figure.

The Carnegie Commission report indicated that in 1978 the average operating budget for a public radio station was $200,000 and $2.1 million for a public television station.(108) There would be few public libraries with sufficient income to support those operations. Nonetheless, there is evidence that some public libraries develop radio and television programs or at least share in the development of these programs. The number of programs and the audience that is served by these programs are not available in the literature, and no state library currently releases statistics on this form of outreach.

Some libraries either directly operate or cosponsor radio reading services for the blind and physically handicapped. These usually employ a sideband of an existing radio station, most commonly a public broadcast station, as a delivery medium. Reception is restricted to the blind because of copyright restrictions on the material read over the stations. Audiences hear current newspapers, local magazines and other topics of interest to the visually handicapped which would not appear in talking book format or be broadcast over other commercial or public stations.

These stations tend to complement talking book and braille book services offered by many local public libraries, and, as a result, libraries are frequently involved with the operation of these services. The variety of involvement can range from total operation of the service, to partial grants, to provision of space and personnel. No statistics are currently available on the extent of public library involvement, but it is likely to increase as these stations become more common throughout the U.S.

A survey of the Public Service Satellite Consortium in 1980 revealed that fewer than 100 public libraries throughout the U.S. which responded to the survey made use of CATV to any degree.(109) That is particularly unfortunate in view of the penetration of CATV into American homes. According to the 1979 Neilsen Report on Television, there were 74,506,340 television households in the U.S. as of September 1978, and 12,618,060 of those households, or 18%, have CATV.(110) That percentage increases dramatically to 54% in rural counties where the highest percentage of smaller, poorer public libraries exist, and where an economical delivery mechanism for information and educational resources would be particulary desirable. The Neilsen report also

revealed that the average television household views 6 1/4 hours of television daily, which would provide some indication of the potential service libraries could offer to the American public if libraries could make better use of this medium.

Library involvement in CATV may range simply from possessing a CATV "drop", permitting the institution to offer access to a wider range of television programming, to a level where the library operates a CATV studio and originates regular programming. The Public Service Satellite Consortium survey did not break down its statistics to reveal the level of involvement among its respondents; however, the average library probably would be only passively involved. A survey of libraries known to be involved in CATV in 1977 revealed that only 44 public libraries provided programs to local CATV operators which they had purchased, borrowed or locally produced for cablecasting.(111)

Both the broadcast stations and CATV operators have proven methods of estimating audience for programs aired or cablecast locally. However, there are no statistics presently available as to the actual amount of programming developed and offered by public libraries, or at least nothing could be located in the literature for the past ten years.

There is almost no involvement by public libraries in videotex services, despite the growing awareness of the technology and significant investment by the private sector. Several libraries have been or are currently involved in various experimental trials (Public Library of Columbus and Franklin County, Chicago Public Library), but nothing of an ongoing nature is currently in evidence.

Videotex, by drawing upon computer technology, offers an efficient and economical means for public libraries to deliver information resources to the home over either standard telephone or CATV lines. Public libraries may not be in a position to take the initiative in establishing either teletext or viewdata versions of videotex, but they may certainly benefit from these services, when available in their communities, through the design and delivery of locally pertinent databases for direct access by their patrons.

Public library utilization of computers is difficult to assess. No survey on a national basis has been reported in the literature in the past ten years. A survey was undertaken in Great Britain and Northern Ireland in February 1978.(112) Questionnaires were sent to 164 public library authorities, and 155 responses were received. Eighty-eight libraries had computerized some of their operations, 13 planned such conversions within the next several years, 5 had some applications under consideration, while 47 reported they had no plans to computerize. The most frequently cited application was cataloging. There were 55 reported operational systems and 24 planned. The next most frequently cited application was circulation. Forty-seven had operational systems with 28 more in various stages of planning. This was followed by accounting, subject indexes, acquisitions and order work and miscellaneous functions. Although 46% of the libraries responding to the questionnaire reported automated circulation control, only 11% of these respondents had all of their service outlets online. Only the high-traffic points were served.

No comparable survey currently exists for American public libraries, although the National Center for Educational Statistics (NCES) plans to include some questions on automation in the next LIBGIS, so that some greater understanding of the application of computers to libraries can be gained. It is probable that various business services such as accounting and payroll are automated in many public libraries. Focused-group discussions with library administrators from 29 institutions in winter, 1982 revealed that computerized business services were very common.(113) Many cited that these services were often directly provided by their city and county governments, or they were commonly contracted for through commercial service bureaus. But at this point, there is no firm source of information on the extent of computerized business services in American public libraries.

Following business services, it is believed that the most common applications of the computer among public libraries are computer-generated-book and computer-output-microfilm (COM) catalogs, cooperative online cataloging, online circulation control, online interlibrary loan, online reference service, acquisitions, serials control, followed by public access microcomputers and online catalogs.

## Computer Output Microfilm Catalogs

Based on telephone conversations with the three major firms offering COM services to public libraries (Brodart, Autographics and Science Press), there are an estimated 500 institutions that employ this technology. Some of this is done on a cooperative basis, with the COM catalog serving as a union catalog for resource sharing, while in other instances it is done unilaterally by institutions seeking COM as a more economical alternative to the card catalog. Some states, such as Alabama and Arizona, have significant COM catalogs distributed statewide for resource sharing as an alternative to online catalogs. A number of major public libraries, such as Los Angeles County Public Library, Chicago Public Library, Fairfax County Public Library, and the Public Library of Columbus and Franklin County, have adopted COM because of the size of their branch systems. Other cooperative systems, such as the East Bay Library Cooperative, find COM an economical means for independent institutions to build a common database of holdings for resource sharing.

COM also provides the essential first step of building a bibliographic database of a library's holdings in machine-readable form, which is the foundation for further automation. While the statistics gathered from major COM vendors reveal that an impressive number of public libraries are using this technology, it should also be noted that some institutions may contract with local vendors for this service and therefore would add to the totals cited by large vendors.

Online Cooperative Cataloging

Public library participation in the three major bibliographic utilities is as follows, based on current membership directories published by those entities:

Active Members in Cooperative Online Cataloging Systems

| | OCLC* | WLN** | RLIN*** | Total |
|---|---|---|---|---|
| Public Libraries | 400 | 21 | 13 | 434 |

*January 1982 **February 1982 ***July 1981

It should be recognized that a number of public libraries are both members of these utilities and COM users, since it is possible to utilize the archive tapes produced for each member to generate the machine-readable record necessary for conversion to COM. The size of public libraries participating in these networks varies enormously from as small as a library serving a community of less than 1,000 with a budget of less than $20,000, to library systems serving areas of more than 4,500,000. The mean population, however, appears to be 246,830.

Focused-group interviews with a sampling of library directors participating in online cooperative cataloging systems reveal a vast range of motivations for joining the utility.(118) While there was belief that some cost avoidance could be achieved, few had performed any studies which could verify that fact. More common motivations appeared to be increased access to resources through the online union catalog, improved quality of cataloging, and the need to develop a database of holdings in machine-readable form.

While the number of public libraries serving as active members of online bibliographic utilities is only 5.1% of the total number of institutions in the U.S., the populations served by these libraries are significant. A study of the OCLC public library participants revealed that while there were only 400 members, those institutions served 98,731,984 people (43.6% of the U.S. population), using service area population figures cited by those institutions in the 34th edition of the American Library Directory.(115) Adding the figures for WLN (3,666,767) and RLIN (11,946,773), the total population would increase to 114,345,524 or 50.5% of the American population, based on the 1980 Census of 226,504,825.

While this figure is impressive, it is actually likely to be much higher, for several reasons. First of all, there are some public libraries which have created their own online cataloging systems, and these are not included in this figure. The Boston Public Library is a notable example. It offers its services to libraries on a fee basis. There is also likely to be a fairly high percentage of indirect usage of the online systems. Forty-five state libraries (40-OCLC, 4-WLN, 1-RLIN) are members of these networks as of January, 1982. These state libraries often provide services for the public libraries of their states through these utilities. One common example is

processing centers. It is not unusual for these agencies to serve more than 100 small public libraries, entering holdings data and using cooperatively developed cataloging data contained on the system. OCLC lists nine processing centers which are members as of September, 1981. Undoubtedly, there are also a number of public libraries, not officially listed as processing centers, that offer online cataloging services to surrounding libraries. Some colleges and universities are also in that category. It would be impossible to accurately estimate the number of indirect users of the online bibliographic utilities, but it would probably significantly swell the total membership of those organizations if they were included.

Several of the major jobbers offer books to public libraries entirely preprocessed with computer-generated catalog cards or cataloging in machine-readable form for COM purposes. There are also some libraries that make direct use of MARC tapes of Library of Congress cataloging to generate their own cards or machine-readable bibliographic records. A variation of this is the MINIMARC system designed by Informatics, Inc. This turnkey system consists of a minicomputer which can store and retrieve MARC records. As of January, 1982, 22 public libraries were using MINIMARC, based on the literature produced by Informatics.

## Circulation Control

There are several variations on the use of the computer to handle public library circulation activities. Some libraries utilize a tabulating card as a book card or charge slip in one of a number of photocharge or semiautomated circulation systems. The tab cards are sorted after the materials are returned, and the computer then generates an exception list for retrieval of delinquent data. No statistics exist on the extent of this application.

Online circulation control, despite considerable publicity in recent years, is not very common, although it is rapidly gaining acceptance. Current surveys reveal that fewer than 3% of all public libraries in the U.S. have such systems. The annual circulation of the public libraries that do ranges from as little as 80,000 to as much as 7 million.(116) The most recent report on turnkey circulation systems indicates that a total of 301 turnkey systems have been sold by 11 major vendors, but that 75 of these systems had been sold in the past 12 months.(117) This survey, which appeared in the February 1, 1982 issue of Library Journal, did not detail the percentage or number of these sytems which had been installed in public libraries, but another recent survey provides somewhat better insight.

In February, 1980, the Library Administration and Management Association of the ALA sent a questionnaire to 261 libraries which were known to have online circulation systems.(118) Of the 126 respondents, 76 (60.3%) were public libraries, and a number of those institutions had cooperative agreements with other public libraries for the sharing of the systems. Because of their relatively higher circulation, public libraries are the primary market for online circulation control systems. Nonetheless, based on focused-group interviews conducted with a sampling of public library administrators in January, 1982, the major barriers which exist to the

adoption of this application (as well as other automation) are the initial cost of the system, its continuing operating costs, and the difficulty of accurately estimating that expense.(119) For many, the installation of a fully automated circulation control system is an important goal which would allow them to improve accessibility to the collection, reduce loss, notify patrons of reserves and overdues more promptly, have substantially better control over library resources, avoid certain future costs as growth in usage occurs, and provide essential management information to ensure more effective use of the tax dollar.

During the early years of development, the typical online circulation control system had limited terminal capacity. It has only been during the past several years that manufacturers have actually been able to install systems with more than 24 terminals. A survey in the February 1 issue of Library Journal provided the following insight to the current system size available for all types of libraries(120):

| Terminals | No. of Systems | Percentage |
|---|---|---|
| 1-8 | 99 | 36 |
| 9-16 | 95 | 33 |
| 17-32 | 52 | 18 |
| 33-48 | 17 | 6 |
| 49+ | 24 | 8 |

As a result of the technological improvement, more large public libraries and cooperative systems should be able to consider adoption of online circulation control systems in the future. Because cost still may represent a major barrier for many smaller or poorer public libraries, cooperative agreements may be the method which will be adopted more frequently in the future. This method would carry with it an added advantage of improved accessibility between collections held by libraries in adjacent communities.

## Online Interlibrary Loan

Undoubtedly one of the most valuable supplemental benefits of participation in a COM catalog, online cooperative cataloging, or online circulation control, is the potential it offers for interlibrary loan. Increased accessibility of materials for the patron was one of the benefits of automation noted by administrators participating in the focused-group interviews held in January, 1982.(121) Certainly not every library that participates in online cooperative cataloging or that shares in the operation of an online circulation system utilizes those systems for ILL purposes, and many public libraries employ COM merely as a means to eliminate their local card catalog. Nonetheless, ILL must be considered a common application among those libraries that have automated to any degree.

No statistics are currently available on the percentage of ILLs which are handled online by public libraries, but the largest online bibliographic network, OCLC, reports that 299 of its 400 public library members were utilizing the ILL Subsystem as of January, 1982. Total traffic on the OCLC ILL Subsystem was 84,641 transactions for the month of November 1981 for all types of libraries.(122) That should be compared with the 8,827,445 ILLs reported in LIBGIS III for public libraries in 1977, before the implementation of the OCLC ILL Subsystem and the adoption of larger cooperative online circulation control systems.

Since so many state libraries are participating in online cooperative cataloging systems, and one of the major roles of the state library today is to encourage the sharing of resources, it is quite probable that there is significant indirect use of these online systems for ILL purposes.

## Online Reference Service

A recent survey undertaken by ALA's Office of Research, with the assistance of the three major brokers of online reference databases (SDC, Lockheed, BRS) revealed that only 53 public libraries (5% of all libraries responding and using online databases) were using online reference services.(123) Questionnaires were mailed by the three vendors to all libraries using these databases. There was substantial duplication, as well as a failure to respond by some libraries which may have gotten confused by the multiple mailings.

The author of that survey report felt that there would seem to be a greater number of public libraries using online reference databases indirectly. She cited a California study which revealed that public libraries tend to refer questions (not the questioner) to other libraries that offer online searches.(124)

The survey indicated that 12% of all 5 million online reference searches performed in 1979 (or 542,319) were performed by libraries.(125) Of the 571 libraries that responded to a survey question on expenditures for online database usage, total expenditure was $4,316,364 for 1979, with a range of $32 to $54,000. The mean expenditure was $6,876.

To help pay for these costs, approximately 72% of the libraries responding charged the user some fee.(126) Among public libraries and junior colleges, this ranged from 66-75%. This contrasted with governmental libraries where the figure was 25-33%, and university and college libraries where almost all charged a fee. The survey also revealed, however, that public libraries and medical libraries (58%) were most likely to have a no-charge period at the start of their searches for patrons. The study also found that the longer the library offered online reference service, the greater the likelihood that the library would charge the user a fee.

Very few of the libraries responding to the survey reported that their charges recovered full costs. Among public libraries, 82% charged their

patrons for the cost of the online database, 76% charged for offline printing, and 60% charged for communications costs.(127) Only 21% charged for the staff time used in the search, 10% charged overhead, and only 3% charged for the annual-use charge assessed the library by the database brokers.

Among public library users responding to the questionnaire, 18% spent $750 or less in 1979 for database usage, 8% spent $751-1,500; 21% spent $1,501-3,000; 8% $3,001-5,000; 3% $5,001-7,500; 18% $7,501-15,000; 5% $15,001-54,000; and 18% gave no response.(128) There is some evidence that more public libraries are beginning to offer direct online reference services, based on focused-group interviews held with a sampling of public library directors in January, 1982.(129) This was a common service offered among public libraries serving populations of 500,000 or more, and it was either offered or desired among public libraries in the medium and smaller range, where those institutions had above average levels of support. Among the public libraries responding to the survey on online reference service, 55% indicated they had offered this service for less than 2 years, 34% offered it for 2-5 years, and only 11% had provided it for more than 6 years.(130)

The volume of usage among those public libraries that provided online reference service varied considerably according to the ALA survey. Twenty-one percent provided 50 or fewer searches in 1979; 21% provided 51-150 searches; 21% provided 151-350; 11% provided 351-800; 15% provided over 800; 11% or 800 public libraries provided no response to this question.(131)

## Acquisitions

While acquisitions was mentioned by many library administrators during the focused-group interviews as a desirable function to automate, there appears to be a very limited number of public libraries that have automated this process to date. Several of the major jobbers offer either online or packaged systems for use by libraries, which permit automated handling of library book orders. Libraries in the 500,000 or greater population categories appear to be the most frequent users because of the volume of their orders, but they report varying degrees of satisfaction.(132) Many library administrators see this as a very complex operation with a need to integrate it with their accounting operations as well as cataloging and circulation systems. Because of this, many have been reluctant to adopt such packages, preferring to wait until acquisitions subsystems are offered by online bibliographic utilities or major turnkey circulation system vendors. Only a few of the circulation system vendors presently offer acquisitions packages, but the largest firm, CLSI, which has sold 175 systems to all types of libraries as of 1981, does offer such an option. Almost all of the vendors plan to offer this system in the future.

OCLC has offered an online acquisitions subsystem since 1981 but at present has only seven public library participants. This may be due to the relative recency of the subsystem and limited awareness among these institutions. Or, it might be due to the desire on the part of more libraries to ensure acquisitions is integrated with other automated systems they are installing or planning to install.

Other Automated Applications

Serials control, automated film booking, online public catalogs, public service computers, and computer-assisted instruction (CAI) are other applications offered by some public libraries. Current estimates are that there are fewer than 20 public libraries that already provide online public catalogs of their holdings, or are planning to install them. The Pikes Peak Public Library in Colorado, the Evanston (IL), Iowa City (IA), Joliet (IL), and Salt Lake (UT) county public libraries are among the agencies with this feature.

One of the major CAI utilities is PLATO, operated by the University of Illinois at Champaign-Urbana. At this time only two public libraries are known to be participants in this system (Chicago and Tucson).(134) Probably much more common is the availability of microcomputers for public use, but there has been no survey on a national level regarding the number of public libraries that offer them. One vendor is currently offering coin-operated microcomputers which can be installed in public areas. These units were displayed at the 1982 Midwinter American Library Association conference in Denver. Since microcomputers can be purchased for as little as $600, even the smallest public library is a potential customer. Software for the most common microcomputers (Radio Shack, Apple, and Commodore) is widely available at an economical price, and more literature is appearing on the application and control of both the hardware and software.

Primary motivation for the installation of this equipment appears to be a desire to offer newer educational and informational resources to the public. Librarians wish to provide patrons with an opportunity to gain knowledge and confidence in computer use, and increasingly there are educational programs, as well as the utilities themselves, becoming appropriate for lay use.

## 15. SUMMARY

There is no typical public library, but there are some conclusions which can be reached regarding certain size institutions, depending upon their location and level of support. The most common type of public library (64.2% or 5,431) serves a population of under 10,000, has a circulation of 30,000 or less annually, a collection of less than 40,000 books, an annual budget of less than $50,000, and has three or fewer FTE employees, one of whom would be likely to have some advanced training or a professional degree. Four out of five of those libraries would be located in rural areas, outside SMSAs.

The most common public library probably would not have adopted any newer form of technology to serve its patrons, and its collection would be almost entirely books, with less than 250 recordings and 40 current magazines. The library would be likely to borrow via interlibrary loan between 200 and 300 books during the year. It would be open 40 hours or less per week, but six days during the week. Typically, it would be housed in facilities of less than 3,600 sq.ft., and would seat fewer than 36 people.

At the other end of the spectrum would be those large public library systems serving populations of 250,000 or more. There are only 115 of these, and they constitute only 1.4% of all American public libraries, yet they account for 30.5% of all usage, 31.2% of all resources, 36.4% of all library staff and 40.7% of all revenues. Typically, they will have between 12 and 28 branch libraries, employ an average of 300 persons, 35% of whom would be professional. They would almost always have budgets in excess of $1 million, and 15% of that income would be for purchase of materials. Support would be between $6 and $12 per capita. Collections would consist of 300,000 volumes or more, and annual circulation would be from 1.5-3 million. These libraries would typically provide between 3,000 and 5,000 books for interlibrary loan per year, and borrow approximately 2,400 books for their patrons through this process. Almost all would have automated some operations, most typically cataloging.

After those libraries serving under 10,000 people, the next most common American public library serves a population of between 10,000 and 50,000. There are 2,176 of these libraries, constituting 25.7% of the total libraries and 24% of total library revenues. Roughly half would be located in rural areas, and half in suburban sections near major cities. One out of every two would have a branch in addition to a central library, and either some bookmobile service or deposit station. These latter extension methods would be much more common with those libraries located in rural areas. They would employ 10-12 people, 40% of whom would be defined as professional. Most of these institutions would have operating budgets of between $50,000 and $400,000, and per-capita support of either $3-$7 or $9-$15. Collections would tend to fall into the 20,000-70,000 range, with circulation in the 100,000-125,000 category. Interlibrary loan traffic would average 800 books borrowed from other libraries, and 500 provided to them. Only a relatively small percentage of these institutions (those with significantly above average levels of per-capita support) would have taken advantage of newer forms of technology to improve service to their patrons. If any such application did occur, it is more likely that this was done in cooperation with other local libraries of similar size and wealth than by an individual library.

There are 444 libraries which serve populations of 50,000-100,000 people, and while that constitutes only 5% of all public libraries, this size library accounts for 13% of all library revenues. Libraries of this size are almost equally divided between urban, suburban and rural areas and because of that they are the hardest to categorize. For example, the typical budget ranges from $100,000 to $1 million. Rural libraries in this category have incomes of less than $400,000, suburban libraries would commonly fall between $200,000-$700,000, and urban libraries above $400,000. Per-capita support would tend to be bracketed between $1-$7, or fall above $9, with the urban and suburban libraries appearing in significant numbers in the higher income categories. The vast majority of these libraries would have collections of 100,000-300,000 volumes, and circulation of about 300,000 per year. Interlibrary loan traffic would average 2,500 books loaned to other libraries, and 2,500 borrowed.

A significant number of the libraries in this category would have adopted some newer technology, or else would be involved in planning for it. Approximately one-third would be using computers in some of their processes, most frequently on a cooperative basis. Typically, these would be libraries with per capita support above the $7 average for all libraries, and would most frequently be located in urban or suburban areas.

The final category of library would be the institution serving a population of between 100,000 and 250,000. There are only 206 of these systems, and they constitute only 2.5% of the total, but they account for 14% of total library revenues. Only 20% of these libraries are rural, and the balance are equally divided between urban and suburban. Each system would be likely to have five or six branch libraries, and there would be a good likelihood of bookmobile service. Staff size would average about 60, 38% of which would be classified as professional. The vast majority would have budgets of $400,000 or more, and per-capita support would cluster between $3 and $9. Collection size would be between 100,000 and 600,000 volumes, with circulation at 600,000-650,000. ILL traffic would average of 2,100 books to other libraries and 1,500 loans from them.

Over half the libraries in this category would have adopted some form of new technology to improve services or operations, and a significant percentage would be planning for further automation, particularly if they had above average per-capita support. Most of these institutions are large enough that it is not necessary for them to think of automation on a cooperative basis, but they are likely to provide the foundation for automation among nearby smaller libraries on a contractual basis.

There are several trends which are evident during this past decade among public libraries, besides the increasing importance and interest in the utilization of newer technology among certain categories of libraries. In the period between LIBGIS I and III, total library expenditures rose by 31.8% for all libraries. However, for those public libraries serving populations of 500,000 or more, expenditures increased by only 21.7%, the lowest of any category of institution. The largest increase was 43.3% for libraries in the 10,000-49,999 bracket, followed by 41.6% for libraries under 10,000. Other categories were 39.7% for libraries in the 100,000-249,999 bracket, 27.9% for the 250,000-499,999 category, and 26.7% in the 50,000-99,999 range.

While it would be nice to believe that those libraries in the lowest percentage categories were simply becoming more efficient, it is more likely that libraries in those population groupings were the worst victims of inflation during that period. The biggest gainers during the period between the surveys were those rural systems serving populations of 100,000-249,999. Here, expenditures rose 91%, compared to those urban public libraries falling in the same population bracket, where expenditures rose 55.7%. The next highest category were suburban public libraries with populations of 10,000-49,999. Their expenditures rose 51.4%.

There is also an interesting trend in library support evident among urban, suburban, and rural libraries. As previously noted, average expenditures rose 31.8% for all libraries between LIBGIS I and III. However, among urban

libraries of all sizes, that average was 27.2%. Suburban library expenditures were slightly above average, at 33.6%. However, the real winners were rural libraries, with an average increase of 43.6%. The only exception to that good news was the rural library serving less than 10,000 people, which experienced an increase only slightly above average.

There are parallels between the two surveys and other statistics for the comparative percentages of expenditures for different size libraries in urban, suburban and rural areas. However, a marked shift appears when analyzing expenditures. The evidence indicates that the rate of growth, in terms of usage and resources, is lower for large urban public libraries and higher for rural and urban areas (populations of 100,000-249,999) and suburban communities of 10,000-49,999.

During the focused-group interviews with selected library administrators held in January 1982 several points were made relative to the influence of cost upon automation. While public libraries serving populations of more than 500,000 were heavily automated, in many instances the primary motivation for their use of newer technology was the need to compensate for the loss of personnel or adjust to some other serious fiscal constraint. By way of contrast, the primary motivation for the use of newer technology among the smaller suburban public libraries was the opportunity it provided to improve public service.

What is evident during this past decade is the decreasing capability of the larger, older public library systems to take the initiative in responding to the needs of their clientele. In contrast, libraries in medium-sized urban areas, suburban systems, and smaller suburban public libraries appear to have taken the initiative in attracting greater usage and developing new services for their patrons, drawing upon significant increases in revenue to fuel those efforts. While larger rural systems appear to have achieved significant increases during this decade, effort is still directed at correcting deficiencies in facilities, collections, and staffing.

No matter what size or type of public library, the facts still indicate that the institution continues to grow and effectively serve the needs of its community. While it is difficult to easily measure the real and total impact of the public library upon American society, there can be little doubt that any institution that experiences over 8 1/2 million user visits during a typical week, circulates almost 1 billion books in a year, and has a total aggregate income of more than $1.6 billion has achieved some stature and utility.

## 16. NOTES

1. U.S. Department of the Interior. Bureau of Education. Public Libraries in the United States of America: Their History, Condition and Management: Special Report. Part I. Washington, D.C. GPO, 1876. p. iii.

2. Ibid. p. 789.

3. U.S. National Center for Educational Statistics. Preliminary Report. Library General Information Survey, LIBGIS III: Public Libraries, 1977-1978. (Photocopy) The Center, 1982. Table 6.

4. Jaques Cattell Press. American Library Directory. 34th ed. N.Y., Bowker, 1981. p. x.

5. Wilkins, Barratt. Survey of State Library Agencies, 1977. Occasional Papers no. 142. Urbana, University of Illinois Graduate School of Library Science. December, 1979. p. 36.

6. U.S. Bureau of Education. Public Libraries... p. 11.

7. Ridgely, David. Annals of Annapolis. Baltimore, Cushing & Brother, 1841. p. 92.

8. U.S. Bureau of Education. Public Libraries... p. 15.

9. Ibid. p. 35.

10. Ibid. p. 10.

11. Ibid.

12. Ibid. p. 875.

13. Ibid. p. iii.

14. Ibid. p. 759

15. Ibid. p. xvii.

17. Ibid. p. 797.

18. Ibid. p. xi.

19. Public Library Association. Principles Task Force. "The Public Library: Democracy's Resource. A Draft Statement of Principles." Public Libraries. Winter, 1981. p. 112.

20. U.S. National Center for Educational Statistics. LIBGIS III. Table 6.

21. U.S. National Center for Educational Statistics. Statistics of Public Libraries, 1974 (LIBGIS I), NCES, 1978. pp. 77-200.

22. Jaques Cattell Press. American Library Directory. 1981.

23. Boyer, Richard & Savageau, David. Places Rated Almanac. Chicago, Rand McNally, 1981.

24. U.S. Bureau of the Census. Public Employment in 1978. Washington, D.C., GPO, 1979. pp. 9-11, 23, 28, 32.

25. International City Management Association. The Municipal Yearbook: 1979. Washington, D.C. The Association, 1979. pp. 63-64.

26. Ibid.

27. Palmour, Vernon E. et al. A Planning Process for Public Libraries. Chicago, American Library Association, 1980.

28. U.S. National Center for Educational Statistics. LIBGIS III. Table 12.

29. LIBGIS I.

30. The World Almanac and Book of Facts, 1982. N.Y., Newspaper Enterprise Association, 1981. p. 57.

31. Urban Libraries Council. "State Aid for Public Libraries," Wilson Library Bulletin. June, 1979. p. 685.

32. LIBGIS I.

33. Goudy, Frank W. "General Revenue Sharing and Public Libraries, An Estimate of Fiscal Impact," Library Quarterly. January, 1982. p. 17.

34. Ibid. p. 18.

35. The Municipal Yearbook, 1979. pp. 64-65.

36. Goudy. "General Revenue Sharing and Public Libraries..." p. 13.

37. Ibid.

38. LIBGIS III. Table 13.

39. Ibid. Table 15.

40. LIBGIS I.

41. Ibid.

42. Chartered Institute of Public Finance and Accountancy, and Society of County Treasurers, Statistical Information Service. Public Library Statistics: 1975-6 Actuals. London, The Institute, 1977. p. 6.

43. LIBGIS III. Table 19.

44. LIBGIS I.

45. Chartered Institute of Public Finance and Accountancy, and Society of County Treasurers, Statistical Information Service. Public Library Statistics: 1975-76 Actuals. p. 6.

46. LIBGIS III. Table 15.

47. LIBGIS I.

48. LIBGIS III. Table 15.

49. Ibid.

50. Ibid.

51. LIBGIS III. Table 6.

52. Ibid.

53. Wilkins, Barratt. Survey of State Library Agencies: 1977. pp. 27, 30.

54. LIBGIS I.

55. LIBGIS III. Table 27.

56. LIBGIS I.

57. Taylor, John N. and Johnson, Ian M. Public Libraries and Their Use: A Research Report on the Use of Public Library Buildings with Implications For Their Distribution, Location and Design. Great Britain Department of Education and Science, Library Information Series No. 4; HMSO, 1978. pp. 51-59.

58. U.S. Bureau of Education. Public Libraries in the U.S... p. xx.

59. LIBGIS III. Table 26.

60. LIBGIS I.

61. LIBGIS III. Table 26.

62. LIBGIS III. Table 20.

63. LIBGIS I.

64. LIBGIS III. Table 19.

65. LIBGIS I.

66. LIBGIS III and I.

67. LIBGIS I.

68. LIBGIS III. Table 20.

69. Ibid.

70. LIBGIS I.

71. LIBGIS III. Table 20.

72. LIBGIS III. Table 21.

73. LIBGIS III. Table 8.

74. U.S. Bureau of the Census. Public Employment in 1978. pp. 9-11, 23, 28, 32.

75. LIBGIS I.

76. Public Library Association. Minimum Standards for Public Library Systems, 1966. Chicago, American Library Association, 1967.

77. Chartered Institute of Public Finance... Public Library Statistics... p. 7.

78. LIBGIS I.

79. Chartered Institute of Public Finance... Public Library Statistics... pp. 17, 23, 29, 35.

80. LIBGIS III. Table 9

81. Ibid.

82. LIBGIS I.

83. LIBGIS III. Table 9.

84. LIBGIS III. Table 23.

85. LIBGIS I.

86. Ibid.

87. Chartered Institute of Public Finance... Public Library Statistics... p. 9.

88. "Statistics of Finnish Public Libraries in 1976 and 1977" Scandinavian Public Library Quarterly 11, 1978. p. 73.

89. The Municipal Year Book: 1979. p. 69.

90. Australian Committee of Inquiry into Public Libraries. Public Libraries in Australia. Canberra, Australian Government Publishing Service, 1976. p. 159

91. IFLA Annual: 1977. Munich, Verlag Dokumentation Saur KG, 1978. p. 159.

92. Ibid. p. 175.

93. LIBGIS I.

94. Australian Committee of Inquiry... Public Libraries... pp. 16, 26.

95. Green, Joseph. "Urban and Suburban Public Library Statistics." The Bowker Annual of Library and Book Trade Information: 1976. pp. 248-9.

96. LIBGIS III. Table 24.

97. The Municipal Year Book: 1979. p. 70.

98. Great Britain Department of Education and Science. Staffing of Public Libraries. HMSO, 1976. pp. 110-11.

99. The Bowker Annual, 1976 and 1979.

100. LIBGIS III. Table 23.

101. LIBGIS I.

102. LIBGIS III. Table 24.

103. Anderson, Arthur J. Adult Education Programs and Activities Provided by Public Libraries in Massachusetts. Boston University, EdD thesis, 1979. p. 7032-A.

104. Gallup Organization, Inc. Book Reading and Library Usage: A Study of Habits and Perceptions: Conducted for the American Library Association. Princeton, NJ, Gallup Organization, 1978. p. 27.

105. Carnegie Commission on the Future of Public Broadcasting. A Public Trust: The Report of the Carnegie Commission on the Future of Public Broadcasting. NY, Bantam, 1979. p. 329.

106. Ibid. p. 341.

107. Ibid. p. 335.

108. Ibid. p. 331.

109. Dibler, Mary. Cable Library Survey Results. Washington, D.C., Public Service Satellite Consortium, 1981. p. 2.

110. 1979 Neilsen Report on Television. Northbrook, IL, A.C. Neilsen, 1979. p. 16.

111. Hollowell, Mary L. The Cable/Broadband Communications Book, 1977-8. White Plains, NY Knowledge Publications, Inc., 1979. p. 92.

112. Passmore, R.B. "Use of Computers in British Public Libraries: A Survey," Program. January, 1979. 13:35-41.

113. Memo from Donald J. Sager to Dr. Neal Kaske, dated 1982 February 5, "Focused Group Interviews, ALA Midwinter Conference, Denver, 1982 January 24-26." Columbus, OH, OCLC, Office of Research.

114. Ibid.

115. American Library Directory, 1981.

116. Memo from Thomas Sanville to Georgia Brown et al, dated 1981 December 1, "LAMA Turnkey Auto-Circ System Study" Columbus, OH, OCLC, Marketing and User Services Division.

117. Matthews, Joseph R. "The Automated Circulation System Marketplace: Active and Heating Up." Library Journal February 1, 1982. p. 233.

118. Memo from Thomas Sanville...

119. Memo from Donald J. Sager...

120. Matthews, Joseph R. "The Automated Circulation System..." p. 8.

123. Lynch, Mary Jo. Financing Online Search Services in Publicly Supported Libraries: the Report of an ALA Survey. Chicago, American Library Association, 1981. p. 20.

124. Ibid. p. 8.

125. Ibid. p. 9.

126. Ibid. p. 10

127. Ibid. p. 27.

128. Ibid. p. 30.

129. Memo from Donald J. Sager...

130. Lynch, Mary Jo. Financing Online Search Services... p. 21.

131. Ibid. p. 22.

132. Memo from Donald J. Sager...